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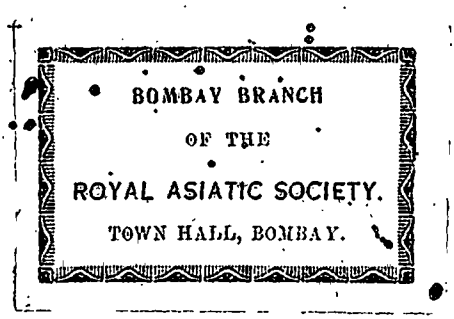

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REPORT

OF THE

BOMBAY CHAMBER OF COMMERCE

FOR THE

YEAR 1859-60.

133530

PRESENTED TO THE ANNUAL GENERAL MEETING
HELD ON THE 21ST SEPTEMBER 1860.

Bombay:
PRINTED FOR THE CHAMBER BY
CHESSON & WOODHALL,
AT THE ALLIANCE PRESS.
1860.

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BOMBAY CHAMBER OF COMMERCE,

ESTABLISHED 22ND SEPTEMBER 1836.

List of Members.

Messrs. Ritchie, Steuart, & Co.
" William Nicol & Co.
" Robert Strong & Co.
" Ewart, Latham, & Co.
" Cardwell, Parsons, & Co.
" Wallace & Co.
" Grey & Co.
" W. and A. Graham & Co.
" Peel, Cassels, & Co.
" A. H. Huschke & Co.
" Heycock & Co.
" Lyon, Brothers, & Co.
" Dirom, Hunter, & Co.
" G. S. King & Co.
" Martin, Young, & Co.
" Finlay, Scott, & Co.
" Volkart Brothers.
" Macindoe, Rogers, & Co.
" Rennie, Scovell, & Co.
" Campbell, Mitchell, & Co.
" Lawrence & Co.
" Leggatt & Co.
" Wm. Sim & Co.
" Killick, Nixon, & Co.
" Leckie & Co.

Messrs. A. C. Brice & Co.
" S. Burstall & Co.
" B. & A. Hormusjee.
" Dadabhoy Hormusjee Cama & Co.
" W. J. Morgan & Co.
" Robinson & Co.
" W. F. Stearns & Co.
" Von Jasmond, Tanner, & Co.
" W. C. Sillar & Co.
" Comber, Son, & Co.
" J. P. Cornforth & Co.
" F. A. Palmer & Co.
" Nasmyth, Macdonald, & Co.
P. & O. S. N. Company.
Oriental Bank Corporation.
Commercial Bank of India.
Chartered Mercantile Bank of India, London, and China.
Chartered Bank of India, Australia, and China.
Agra and United Service Bank.

Committee for 1859-60.

Henry Scott, Esq., *Chairman.*
Andrew Grant, Esq., *Deputy Chairman.*
A. C. Gumpert, Esq.,
R. McIlwraith, Esq., } *Members.*
M. H. Scott, Esq.,

Committee for 1860-61.

Andrew Grant, Esq., *Chairman.*
George Hamilton, Esq., *Deputy Chairman.*
J. G. Volkart, Esq.,
George Lord, Esq., } *Members.*
S. Burstall, Esq.,

Messrs. Ritchie, Steuart, & Co., *Treasurers.*
H. Brooke, Esq., *Secretary.*
Muckoondrow Bhawoo, *Clerk.*

RULES AND REGULATIONS

OF THE

BOMBAY CHAMBER OF COMMERCE,

REVISED AND ADOPTED AT THE ANNUAL GENERAL MEETING HELD ON THE 19TH SEPTEMBER 1851.

I. THAT the object and duties of the Chamber shall be to encourage a friendly feeling and unanimity among commercial men on all subjects involving their common good; to promote and protect the general mercantile interests of this Presidency; to collect and classify information on all matters of general commercial interest; to obtain the removal, as far as such a society can, of all acknowledged grievances affecting merchants as a body, or mercantile interests in general; to receive and decide references on matters of usage and custom in dispute, recording such decisions for future guidance; and by this, and other means, assisting to form a code of practice for simplifying and facilitating business; to communicate with the public authorities, with similar associations in other places, and with individuals, on all subjects of general mercantile interest; and to arbitrate between parties willing to refer to, and abide by, the judgment of the Chamber.

II. That all persons engaged or interested in mercantile pursuits, desirous of joining the Chamber, and disposed to aid in carrying into effect the objects of the same, shall be admitted Members by the votes of a majority of a General Meeting, as provided for in Rule III.

III. That an absolute majority of firms constituting the Chamber shall be held sufficient to form any General Meeting

when the same has been regularly called together,—one partner representing a firm, but two or more partners in one firm being present, only to count as one Member of the Chamber.

IV. That the Chamber reserves to itself the right of expulsion in case of need, to be decided at a General Meeting by a majority of three-fourths of the Members present at such General Meeting duly convened.

V. That the subscription of each firm, or Member of the Chamber, shall be Rupees 15 per month.*

VI. That the affairs and funds of the Association shall be managed by a Committee of Five Members, consisting of the Chairman and Deputy Chairman of the Chamber, and three Members, to be elected annually at a General Meeting of the Chamber in the month of September. The Chairman and Deputy Chairman, as the case may be, to be *ex-officio* Chairman of the Committee, and, in their absence, the Committee to elect their own Chairman. Three to be a quorum.

VII. That no two Members of one firm shall be on the Committee at the same time.

VIII. That all questions before the Committee shall be decided by a majority, the Chairman having a second or casting vote in case of an equality of votes.

IX. That the Committee shall meet on Friday, or on such other day as may be found by them most convenient, of every week, to receive and dispose of all communications and references, and to take under their consideration, generally, all matters embraced in the objects of the Chamber; and that their proceedings be laid on the table for the inspection of all Members, subject to such regulations as they may make.

X. That General Meetings of the Chamber be held from time to time, as the Committee for the time being shall propose; that a Special General Meeting shall be called by the Chairman, or by his order, five days after the receipt of a requisition from any three firms—Members of the Chamber; but that a majority of

* Increased to Rs. 20 by a Resolution of the Annual General Meeting in 1856.

firms, represented by one or more Members from each firm, being Members of the Chamber, be required to constitute such General Meeting; and that the Annual General Meeting shall be held in the month of September, on such day as the Committee for the time being shall direct; such Meeting to be convened on a five days' notice.

XI. That the Committee be authorised to provide suitable accommodation for the meeting of the Chamber; to pay all expenses of the establishment, and to control, generally, the management of the affairs of the Chamber.

XII. That all monies or funds of the Chamber, as received, be paid into the hands of the Treasurer or Treasurers for the time being, and that the same be available by cheques signed by the Chairman, or in his absence by the Acting Chairman for the time being, and by one other Member of the Committee.

XIII. That a Secretary be appointed by a majority of Members, in such way as the Committee for the time being may point out; that it shall be the duty of such Secretary to keep the records and accounts of the Chamber, to collect subscriptions, handing the same over to the Treasurer, to conduct correspondence, and to act generally under the directions of the Committee.

XIV. That all the proceedings of the Committee be subject to approval, or otherwise, of General Meetings, duly convened.

XV. That any stranger engaged or interested in mercantile pursuits, visiting the Presidency, may be introduced as an Honorary Member, by any Member of the Chamber inserting his name in a book to be kept for that purpose; but that a residence of two months shall subject him to the rule for the admission of Members.

XVI. That an Annual Report of the proceedings be made, and copies sent to similar associations in India, China, and elsewhere.

XVII. That the foregoing Rules be added to, or altered, only by a majority of Members of the Chamber.

XVIII. That the firms whose signatures are attached be considered as acknowledging the "Bombay Chamber of Commerce," as now constituted, to represent their public and united interest.

XIX. That the foregoing Rules be copied into a book, to be kept with the records of the Chamber, and be signed by all the Members, and that copies be printed and delivered to each firm.

RESOLUTION OF SPECIAL GENERAL MEETING, NOV. 21, 1856.

XX. That in the event of any Member of Committee resigning or declining to serve, the remaining Members of the Committee shall fill up the vacancy.

RESOLUTION OF ANNUAL GENERAL MEETING, SEPT. 29, 1858.

XXI. That for the future all General Meetings of the Chamber shall be advertised in the Newspapers.

TONNAGE SCALE AT BOMBAY.

At a General Meeting of Merchants, held in the Offices of the Chamber of Commerce, Bombay, on the 6th June 1856, convened by Circular, under the direction of the Committee of the Chamber, William Forsyth Hunter, Esq., Chairman of the Chamber, in the Chair—it was proposed by Henry Scott, Esq., of Messrs. Finlay, Scott, & Co., seconded by John Campbell, Esq., of Messrs. Campbell, Mitchell, & Co., and unanimously carried,—"That from and after the 1st January 1857, the following amended Scale be taken to regulate the Trade from Bombay and the Malabar Coast to the United Kingdom, in the absence of Special Agreement to the contrary:—

Articles.	To the Ton.
Aloes, in kegs	16 cwt.
Alum, in bags	20 do.
Annatto, in cases	50 feet.
Apparel	do.
Arrowroot, in cases	do.
Assafœtida, in cases	do.
Barilla	20 cwt.
Bees'-wax, in cases	50 feet.
Betelnut, in bags	16 cwt.
Blackwood, in straight square logs	50 feet.
Do. otherwise	20 cwt.
Books	50 feet.
Borax, in cases	do.
Do. in bags	20 cwt.
Bullion	per cent.
Camphor, in cases	50 feet.
Canes, Rattans, in bundles	16 cwt.
Cardamoms, in bundles	50 feet.
Cassia Lignea, Fistula, and Buds	do.
Chassum	10 cwt.
China Root, in cases	50 feet.

ARTICLES (continued).	To the Ton.
Cigars	50 feet.
Cinnamon, in bales	6 cwt.
Do. in cases	50 feet.
Cloves, in cases	do.
Do. in bags or frazils	10 cwt.
Coals	20 do.
Cocoa, in bags	12 do.
Coculus Indicus, in bags	16 do.
Coffee, in cases	50 feet.
Do. in bags or frazils	16 cwt.
Coir, in bales	50 feet.
Do. in bundles or loose	6 cwt.
Do. Rope, in coils	8 do.
Colocynth, in cases	50 feet.
Colombo Root, in bags	14 cwt.
Copra, in robins	12 do.
Coral, Rough (not Specimens), in bags	20 do.
Cotton, in bales	50 feet.
Cowries, in cases	do.
Do. in bags	20 cwt.
Cubebs	12 do.
Cummin Seed, in cases	50 feet.
Cutch or Terra Japonica, in bags or baskets, unscrewed	16 cwt.
Dates, wet	20 do.
Do. dry	16 do.
Dragon's Blood, in cases	50 feet.
Ebony, square and straight	do.
Do. otherwise	20 cwt.
Elephants' Teeth, in cases	50 feet.
Do. in bundles	18 cwt.
Do. loose	20 do.
Furniture	50 feet.
Galingals	12 cwt.
Galls, in bags	16 do.
Do. in cases	50 feet.
Ginger, Dry, in cases	do.
Do. in bags	12 cwt.
Gram	20 do.
Ground Nuts, shelled	16 do.
Gums of all kinds, in cases	50 feet.
Do. Olibanum, in bags	16 cwt.
Hurtall, in cases	50 feet.
Hemp, in screwed bales	do.
Do. loose or in bundles	7 cwt.

Articles (continued).	To the Ton.
Hides and Skins, in screwed bales	50 feet.
Do. loose and in small bundles	12 cwt.
Horns, Buffaloe and Cow, loose	16 do.
Do. Deer, loose	8 do.
Horn Tips, of any kind	16 do.
Indigo, in cases	50 feet.
Jackwood	do.
Lac Dye, in shells or cases	do.
Linseed, in bags	18 cwt.
Mace, in cases	50 feet.
Mother-o'-Pearl, in cases	do.
Do. in bags	20 cwt.
Munjeet or Madder Root, in cases or bales	50 feet.
Do. in bundles or bags	12 cwt.
Musk, in cases	50 feet.
Myrabolams, in bags	16 cwt.
Nutmegs, in cases	50 feet.
Nux Vomica, in cases	do.
Do. in bags	16 cwt.
Oil of any kind, in casks	210 imp. gals.
Oil Seeds, Teel, Rape, Mustard, Khorassan, and Castor	17 cwt.
Opium	per chest.
Paddy, in bags	16 cwt.
Pepper, in bags	do.
Pimento	14 do.
Plumbago, in bags	20 do.
Rattans, in bundles	16 do.
Do. Ground	do.
Red Wood	do.
Rhubarb, in cases	50 feet.
Rice, in bags	20 cwt.
Safflower, in cases	50 feet.
Do. in screwed bales	do.
Do. in bags	10 cwt.
Sago, in cases	50 feet.
Sal Ammoniac, in cases	do.
Do. in bags	18 cwt.
Saltpetre	20 do.
Sandal and Sapan Wood	16 do.
Sealing-Wax, in cases	50 feet.
Senna, in bags	6 cwt.
Do. in bales	50 feet.
Shells, Rough, in bags	20 cwt.
Silk, in bales	10 do.

Articles (continued).	To the Ton.
Silk, in cases	.. 50 feet.
Soap, in cases	.. do.
Sugar, in bags	.. 20 cwt.
Talc	.. do.
Tallow	.. 50 feet.
Tamarinds	.. 18 cwt.
Tea, in chests	.. 50 feet.
Timber, Teak, Square Planks and Poon ..	.. do.
Do. Round, one-fifth off.	
Tobacco, in bales	.. 50 feet.
Tortoise Shells, in chests	.. do.
Turmeric, in bags	.. 13 cwt.
Tutenague	.. 20 do.
Unrated Wood	.. 14 do.
Whangees (*vide* Canes)	.. 16 do.
Wheat	.. 20 do.
Wines and Spirits, in casks	.. 50 feet.
Do. in cases	.. do.
Wool, in screwed bales	.. do.
Zedoary	.. 20 cwt.

*** The Standard Ton at Bombay for Measurement Goods shall be taken at 50 cubic feet."

Proposed by James Fleming, Esq., of Messrs. Wm. Nicol & Co., and seconded by William Trevor Roper, Esq., of Messrs. Lawrence & Co., and carried unanimously,—"That the Freight on Oil be paid on the full gauge of the Cask, ascertained at the port of discharge."

Proposed by Thomas Stock Cowie, Esq., of Messrs. Remington & Co., and seconded by John Parsons, Esq., of Messrs. Cardwell, Parsons, & Co., and carried unanimously,—"That when Freight is payable on weight, the same is to be on the Nett Weight delivered."

(Signed) W. F. Hunter,
Chairman.

RULES AND REGULATIONS

FOR THE MEASUREMENT BY CALLIPERS, UPON SHIPMENTS TO GREAT BRITAIN, OF COTTON, WOOL, HEMP, AND OTHER SCREWED AND PRESSED BALES, AT THIS PORT.

I. That Callipers shall from time to time be submitted to the Secretary of the Chamber of Commerce, and, if found correct, shall be branded with a Stamp bearing the name of the Chamber, to indicate the same.

II. That if, from use or otherwise, any Callipers should get out of order and be objected to, the party objecting shall send the Callipers to the Chamber for examination ; and should the objection be valid, the Chamber Stamp shall be defaced by the Secretary ; if, however, the objection is found to be groundless, the Secretary shall give a note to that effect, and the party objecting shall be bound by his decision.

III. That any Callipers found incorrect, and on which the Stamp has been defaced, may be re-stamped after adjustment.

IV. That no measurements shall be held good, except such as are taken by Callipers bearing the Chamber's Stamp.

V. That Cotton, Hemp, Wool, and other screwed bales, shall be measured as follows, namely : the greatest length to be first ascertained, and then the Bale to be set on either end, as the Shipmaster may wish, and cross measurements to be taken at top over the lashings, excepting the knots, and as near the centre of the bale as possible. That an average of 100 bales be struck by ascertaining the actual measurement of any 10 bales, and proportionately, the Shipper selecting and measuring one-half, and the Shipmaster the other half ; should, however, any dispute or difficulty arise in the selection of bales, either party to have the option of measuring the whole quantity.

VI. That all produce subject to measurement be measured within the day on which it has been ordered to be screwed, provided the order has been given by the Shipmaster or Agents of the Vessel; and that from 1st June to 15th October the same be measured at the Screws; during the remainder of the year, if required, on the Bunder, weather permitting. No Cotton, Wool, or other goods, to be measured, until a Custom House Pass has been obtained for the same.

VII. That, in the event of the Shipmaster not attending to measure at such hour as may have been appointed by him, the Agent or Agents of the Ship do empower a person to attend on his behalf, whose sanction to the measurement shall be binding upon the Shipmaster.

GENERAL RATES OF COMMISSION.

Table of General Rates of Commission chargeable in Bombay; as revised by the Chamber of Commeree, and confirmed at a General Meeting, held on the 11th February 1843.

		Per cent.
1,	On procuring freight	5
	Brokerage, when actually incurred, shall be considered a legitimate charge in ship's accounts.	
2,	On collecting freight	2½
3,	On tendering a vessel (if accepted) for the conveyance of troops; on the amount of the charter party ..	5
4,	On shipping goods of every description, on which no commission for the purchase has been charged ..	2½
5,	On shipping treasure, bullion, and jewellery ..	1
6,	On ship's disbursements when in funds	1
7,	On ship's disbursements when not in funds	2½
8,	On amount of passage money, whether the same passes through the Agent's hands or not	2½
9,	On effecting insurance	0½
10,	On settling insurance losses, whether partial or total, also on procuring return of premium, exclusive of commission on receipt of cash	2½
11,	On the sale or purchase of goods of all denominations (except as under) —	
12,	On purchases of all kinds with the proceeds of goods sold, and on which a commission of 5 per cent. has been previously charged	2½
13,	On the sale or purchase of ships, houses, and lands, of opium, and of diamonds, pearls, and jewellery of all descriptions	2½
14,	On the sale or purchase of treasure or bullion ..	1
15,	On the sale or purchase of cattle	5½
16,	On goods consigned which are disposed of by outcry, or sent to a shop on net proceeds	5

		Per cent.
17,	On goods consigned, and afterwards withdrawn; invoice cost..	2½
18,	On guaranteeing the responsibility of person to whom goods are sold, on the amount of sale	2½
19,	On attending the delivery of contract goods to the company or individuals	2½
20,	On collecting house-rent	2½
21,	On sale or purchase of private bills of exchange ..	1
22,	On effecting remitances by bills of exchange ..	1
23,	On taking up at interest bills from the Company, exclusive of one per cent. on remitting	1
24,	On exchanging Company's securities of all descriptions, or investing money therein, and on transferring Government paper from one constituent to another	0½
25,	On surrendering or depositing in the Treasury Company's security of all descriptions	0½
26,	On procuring money on respondentia or on loan ..	2
27,	On recovering of bonds, or of bills for absentees, overdue at the time of their being placed in the possession of the Agent	2
28,	On debts when a process at law by arbitration is necessary	2½
29,	On debts when recovered by such means.. ..	5
30,	On managing the affairs of the estate for an executor or administrator..	5
31,	On recovering funds from a bankrupt estate ..	2½
32,	On guaranteeing bills, bonds, or debts in general, by endorsement or otherwise	2½
33,	On bills of exchange returned noted or protested ..	1
34,	On granting and cashing letters of credit.. ..	2½
35,	On becoming security to Government or public bodies in any case..	2½
36,	On depositing Government paper as security for constituents..	1
37,	On receipt or payment, at the option of the Agent, of all monies not arising from proceeds of goods on which commission has been previously charged.	1
38,	In all cases where the debtor side of the account exceeds the creditor side, including the balance of interest, commission to be charged at the rate of..	1

SHIP FREIGHT INWARDS.

WITH reference to the payment of Inward Freight at Bombay when stated in Sterling, we, the undersigned Merchants, do hereby agree, that for the future, all such Freight falling due under Bills of Lading dated on or after the 1st November next, shall (in the absence of Special Agreement, *or when stated to be payable at the current rate of Exchange*) be paid and received by us at the rate of Two Shillings per Rupee.

It is understood that the Agreement dated February 1849 shall continue to regulate the payment of all Freights falling due under Bills of Lading dated previous to 31st October next.

(Signed) FORBES & Co.
„ REMINGTON & Co.
„ LECKIE & Co.
„ LEGGATT, MCKENZIE, & Co.
„ PEEL, CASSELS, & Co.
„ FINLAY, SCOTT, & Co.
„ LAWRENCE & Co.
„ A. H. HUSCHKE & Co.
„ DIROM, HUNTER, & Co.
„ STEVENS BROTHERS.
„ G. PERRY & Co.
„ W. LANGLOIS, A. LE-ROYS, & Co.
„ ROBERT STRONG & Co.
„ EDWARD BATES & Co.
„ GREY & Co.
„ VINAY, FILS, & Co.
„ HEMCOCK & Co.
„ WILLIAM MCHAFFIE & Co.
„ HASTINGS HICKS, SIM, & Co.

(Signed) VOLKART BROTHERS.
„ RENNIE, SCOVELL, & Co.
„ LYON, BROTHERS, & Co.
„ WM. NICOL & Co.
„ MARTIN, YOUNG, & Co.
„ RITCHIE, STEUART, & Co.
„ MACINDOE, ROGERS, & Co.
„ CARDWELL, PARSONS, & Co.
„ W. & A. GRAHAM & Co.
„ ROBERT FRITH & Co.
„ WALLACE & Co.
„ MCCULLOCH & Co.
„ EWART, LATHAM, & Co.
„ CAMPBELL, MITCHELL, & Co.
„ W. C. SILLARS & Co.
„ KILLICK, NIXON, & Co.
„ GEORGE POLLEXFEN & Co.
„ T. R. RICHMOND.

Bombay, August, 1858.

GENERAL MEETINGS IN 1859-60.

A SPECIAL GENERAL MEETING was held at the Office of the Chamber, at noon on Wednesday, the 28th December 1859, for the purpose of electing a Chairman, in the room of H. D. Cartwright, Esq., resigned.

Members present,—

A. T. Binny, Esq., in the Chair.

A. C. Gumpert, Esq.,
E. P. Repton, Esq.,
Alex. Wallace, Esq.,
William Sim, Esq.,
G. Steel, Esq.,
G. Hamilton, Esq.,
R. P. Nixon, Esq.,
C. Leggatt, Esq.,
H. D. Cartwright, Esq.,
John Fleming, Esq.,
R. McIlwraith, Esq.,
W. J. Morgan, Esq.,
Geo. Lord, Esq.,
S. Burstall, Esq.,
R. Latham, Esq.,
W. Cassels, Esq.,
J. Farrar, Esq.,
H. Brooke, Esq., and
J. Ritchie, Esq.

The Chairman having read the requisition calling the Meeting, the following Resolution was brought forward :—

Proposed by J. Fleming, Esq., seconded by G. Hamilton, Esq., and carried unanimously,—"That Mr. Henry Scott be confirmed as Chairman of the Chamber, and Mr. Andrew Grant be elected Deputy Chairman."

The Meeting was then dissolved, after a vote of thanks to the Chairman for his conduct in the chair.

A SPECIAL GENERAL MEETING was held at the Office of the Chamber, at noon on Friday, the 4th May 1860.

Members present,—

Henry Scott, Esq., in the Chair.

Andrew Grant, Esq.,
A. C. Gumpert, Esq.
M. H. Scott, Esq.,
J. G. Volkart, Esq.,

T. F. Gray, Esq.,
James Bevis, Esq.,
W. Sim, Esq.,
W. J. Morgan, Esq.,
A. F. Wallace, Esq.,
E. P. Repton, Esq.,
S. Burstall, Esq.,
George Hamilton, Esq.,
Byramjee Hormusjee Cama, Esq.
Thos. Bradley, Esq.,
H. Brooke, Esq.,
Robert Strong, Esq.,
John Cassels, Esq.,
R. P. Nixon, Esq.,
George Lord, Esq.,
Fielding Scovell, Esq.,
W. Trevor Roper, Esq., and
John Fleming, Esq.

The Chairman having called attention to the general objects of the Meeting, as set forth in the circular addressed to the Members, the following Resolutions were brought forward :—

Proposed by Andrew Grant, Esq., seconded by J. G. Volkart, Esq., and carried unanimously,—"That the following addition shall be made to the Table of Commissions chargeable in Bombay, agreed to at a General Meeting held on the 11th February 1843 :—'Brokerage, when actually incurred, shall be considered a legitimate charge in ships' accounts.'"

Proposed by Robert Strong, Esq., seconded by John Cassels, Esq.,—"That the rate of brokerage for effecting charters or engaging freight to all parts of the world shall in future be fixed at one per cent. on the amount of freight."

The following amendment was proposed by M. H. Scott, Esq., seconded by G. Hamilton, Esq.,—"That it is not expedient that the brokerage on the procuring of freight shall be a percentage, or other than a fixed charge of so much per ton."

Another amendment was also moved by A. Grant Esq., seconded by J. Bevis, Esq.,—"That the question be postponed till the Annual Meeting in September, and that, in the meantime, the brokers should be conferred with, in order, if possible, to come to an arrangement which may be agreed to by all parties."

The amendment having been put and lost, the original resolution was carried.

The following firms were then duly elected Members of the Chamber :—

H. B. MacCulloch, Esq., Officiating Manager of the Agra and United Service Bank, proposed by H. D. Cartwright, Esq., seconded by A. C. Gumpert, Esq.

Messrs. Robinson & Co., proposed by John Fleming, Esq., seconded by George Lord, Esq.

Messrs. F. A. Palmer & Co., proposed by Henry Brooke, Esq., seconded by Henry Scott, Esq.

Messrs. J. P. Cornforth & Co., proposed by George Lord, Esq., seconded by J. Bevis, Esq.

Messrs. Comber, Son, & Co., proposed by Andrew Grant, Esq., seconded by S. Burstall, Esq.

Messrs. W. C. Sillar & Co., proposed by T. F. Gray, Esq., seconded by W. T. Roper, Esq.

Messrs. Von Jasmond, Tanner, & Co., proposed by J. G. Volkart, Esq., seconded by A. C. Gumpert, Esq.

Messrs. W. F. Stearns & Co., proposed by W. T. Roper, Esq., seconded by A. C. Gumpert, Esq.

The following letter, from Lord Overstone to W. B. Tristram, Esq., was read to the Meeting :—

From LORD OVERSTONE,

To W. B. TRISTRAM, Esq.

SIR,—I have the honor to acknowledge the receipt of the petition which you have forwarded to me from Bombay, against the Indian License Bill, and I have lost no time in presenting it to the House of Lords previous to our adjournment for the approaching Easter recess. In discharging this duty, I urged upon the House the importance of the subject to which the petition referred, and the claims to respectful attention arising from the importance of the public meeting in which the petition originated, as well as the number and respectability of the petitioners. The Duke of Argyll, on behalf of the Government, stated that the Act against which the petition was directed had been withdrawn, and another substituted, from which the objectionable provisions had been expunged.—I have the honor to be, &c.,

(Signed) OVERSTONE.

Carlton Gardens, London, 31st March 1860.

With reference to the foregoing letter, it was proposed by George Hamilton, Esq., seconded by W. Sim, Esq., and carried unanimously,—"That the thanks of the Chamber be presented to J. S. White, Esq., for his gratuitous services in preparing the petitions to Parliament and to the Legislative Council of India against the License Bill."

It was then proposed by Andrew Grant, Esq., seconded by R. Strong, Esq., and carried unanimously,—"That a Committee of the Chamber of Commerce be appointed to draw up an address to Lord Elphinstone, expressive of their sense of the courtesy which has always characterised His Lordship's communications with the Chamber."

Upon the motion of A. C. Gumpert, Esq., seconded by Michael

H. Scott, Esq., the following gentlemen were appointed a Committee for the above purpose :—Henry Scott, Esq., Andrew Grant, Esq., Robert Strong, Esq., John Fleming, Esq.

The Meeting was then dissolved, after a vote of thanks to the Chairman for his conduct in the chair.

A SPECIAL GENERAL MEETING was held at the Office of the Chamber, at noon on Thursday, the 19th July 1860.

Members present,—

Henry Scott, Esq., in the Chair.

Andrew Grant, Esq.,
M. H. Scott, Esq.,
Thos. Bradley, Esq.,
J. G. Volkart, Esq.,
Alex. Wallace, Esq.,
S. Burstall, Esq.,
W. T. Roper, Esq.,
John Cassels, Esq.,
Edwin Heycock, Esq.,
J. Bevis, Esq.,
R. P. Nixon, Esq.,
W. Sim, Esq.,
Edward Parker, Esq.,
John Fleming, Esq.,
F. C. Marval, Esq.,
Gavin Steel, Esq.,
Geo. Lord, Esq.,
T. Comber, Esq.,
James Hunter, Esq.,
H. Brooke, Esq.,
John Farrar, Esq.,
J. N. Fleming, Esq.,
Henry Rogers, Esq.,
Robert Angus, Esq.,
Ardaseer Hormusjee Wadia, Esq., and
W. J. Morgan, Esq.

The Chairman having drawn attention to the general object of the meeting, viz. the consideration of Mr. Wilson's Currency Bill, the following Resolutions were brought forward :—

Proposed by John Fleming, Esq., seconded by S. Burstall, Esq.,—"That, in the opinion of the Chamber, the issue of paper money is not a proper function of Government, and that, from the peculiar circumstances of India, the power to issue notes would be especially dangerous in the hands of the Government of this country."

The following amendment was proposed by Andrew Grant, Esq., seconded by H. Brooke, Esq.,—"That it is the opinion of this Chamber, that the introduction of a well-regulated paper currency would be beneficial to British India"; and—"That the Chamber, without committing itself to approval of all the details of Mr. Wilson's scheme, affirms the general principle, that, in the present state of this country, the mode of introducing a paper currency most likely to be successful is through the direct instrumentality of the Supreme Government."

The amendment having been put and lost, the original resolution was carried by a majority.

Proposed by M. H. Scott, Esq., seconded by John Cassels, Esq., and carried,—"That the scheme introduced by Mr. Wilson does not ensure the absolute convertibility of the issue, as it professes to do, and that it would detract from the stability of the Government of India to superadd to its political risks the danger of monetary convulsions."

Proposed by Edwin Heycock, Esq., seconded by John Fleming, Esq., and carried,—"That the withdrawal of the note circulation from the existing banks of issue must diminish the means at their command for facilitating trade, and that Mr. Wilson's scheme offers no compensating advantages; whereas a Bank of Issue of large capital would, in times of pressure, afford great relief to the commercial classes, and at all times give stability to legitimate credit."

Proposed by G. Steel, Esq., seconded by W. Sim, Esq., and carried,—"That, in the opinion of this Chamber, it is possible to construct in India a National Bank, on the model of the Bank of England, either by the reconstruction of the existing banks of issue, or by the establishment of one Bank of Issue for all India."

Proposed by J. N. Fleming, Esq., seconded by James Bevis, Esq., and carried unanimously,—"That copies of the preceding resolutions, and minutes of such of the Members as may not object, be sent to the Bombay Government, with a request that the same may be communicated to the Government of India."

The Chairman having drawn the attention of the Meeting to the fact that the resolution passed at the Special General Meeting held on the 4th May last, relating to the rate of brokerage on freight engagements, had not been adhered to by all the Members, it was proposed by A. Grant, Esq., seconded by John Fleming, Esq., and carried unanimously,—"That the following Committee, with power to add to their number, be appointed, to confer with the principal European and Native brokers, and to endeavour to come to some arrangement mutually satisfactory; that they report the result to the General Meeting of the Chamber in September, with a view to the final settlement of the question; and that, in the meantime, the old rate of four annas be adopted, pending such settlement. The Committee to be as under:—G. Lord, Esq., H. Brooke, Esq., and Gavin Steel, Esq."

The following letter (No. 182 of 1860) from the Secretary to Government having been read, as well as the Minutes of those Members who had recorded their opinions upon the subject—

No. 2499 OF 1860.

REVENUE DEPARTMENT.

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce, Bombay.

SIR,—The Government of India propose to appoint a Committee in Calcutta to settle a uniform Tariff of Valuations for all India, and they desire that the Chamber of Commerce here should be apprised of their intention, and informed, that if there should be any merchant of Bombay, either as a resident or a visitor at Calcutta, whom the Chamber would desire to be placed on the Committee, or if the Chamber should think it necessary, on their own account, to depute one of their number expressly for the purpose, the Government of India would be glad to be able to meet their wishes.

2. In making this intimation, I am directed by His Excellency the Governor in Council to request that the Chamber will have the goodness to state their views.—I have the honor to be, &c.,

(Signed) B. H. ELLIS,
Secretary to Government.

Poona, 12th July 1860.

The following resolution was brought forward :—

Proposed by John Fleming, Esq., seconded by W. T. Roper, Esq., and carried unanimously,—"That a letter be addressed to the Government of India, protesting against the proposal to establish uniform Tariff Valuations for all India, although at the same time approving of an assimilation of system."

The Meeting was then dissolved, after a vote of thanks to the Chairman for his conduct in the chair.

The ANNUAL GENERAL MEETING was held at the Office of the Chamber, at noon on Friday, the 21st September 1860.

Members present,—

Henry Scott, Esq., in the Chair.

Andrew Grant, Esq.,	W. F. Stearns, Esq.,
James Bevis, Esq.,	S. Burstall, Esq.,
George Hamilton, Esq.,	R. P. Nixon, Esq.,
Thomas Comber, Esq.,	T. Bradley, Esq.,
T. F. Gray, Esq.,	A. C. Gumpert, Esq.,
J. G. Volkart, Esq.,	Gavin Steel, Esq.,

George Lord, Esq.,	H. Brooke, Esq.,
Byramjee Hormusjee Cama, Esq.,	M. H. Scott, Esq.,
John Farrar, Esq.,	A. F. Wallace, Esq.,
Robert Strong, Esq.,	Richard Wallace, Esq.,
Archd. Scott, Esq.,	James Hunter, Esq., and
	W. T. Roper, Esq.

The Annual Report of the Committee having been read, it was moved by Geo. Lord, Esq., seconded by J. G. Volkart, Esq., and unanimously resolved,—"That the Report now read be approved of, and printed for general information, together with the documents therein referred to."

Moved by Gavin Steel, Esq., seconded by John Farrar, Esq., and carried unanimously,—"That the Members of the Committee retiring are entitled to, and do receive, the thanks of the Chamber, for their attention to its interests during the year of office now expired."

Moved by Robert Strong, Esq., seconded by James Bevis, Esq., and carried unanimously,—"That the Committee for the ensuing year shall be as follows :—

Andrew Grant, Esq., *Chairman.*
George Hamilton, Esq., *Deputy Chairman.*
J. G. Volkart, Esq., }
George Lord, Esq., } *Members.*
S. Burstall, Esq., }

Moved by Geo. Hamilton, Esq., seconded by S. Burstall, Esq., —"That the Report of the Committee specially appointed to inquire into the subject of brokerage on freights, which has been read to the Meeting, be adopted ; and that the Resolution passed in May be therefore rescinded."

The following amendment was moved by A. C. Gumpert, Esq., seconded by T. F. Gray, Esq.,—"That the resolution adopted by the General Meeting held in May last be adhered to."

The amendment having been lost by a majority of 16 to 6, the original resolution was put and carried. The following gentlemen voted for the amendment :—Messrs. A. C. Gumpert, T. F. Gray, Geo. Lord, W. T. Roper, John Farrar, and James Bevis.

The firm of Nasmyth, Macdonald, & Co., proposed by Geo. Hamilton, Esq., and seconded by M. H. Scott, Esq., was then balloted for, and declared duly elected.

It was moved by T. F. Gray, Esq., seconded by R. Strong, Esq., —"That the propriety of reducing the Subscription to its former rate of Rs. 15 be referred to the Committee."

After a vote of thanks to the Chairman, the Meeting separated.

REPORT.

Your Committee have now to report upon their proceedings, and upon the subjects which have engaged the attention of the Chamber during the past year.

RAILWAY COMMUNICATION.

An interesting report, which will be found in Appendix U, has been furnished, at the request of the Chamber, by the Secretary to the Great Indian Peninsula Railway. The progress appears satisfactory. It is matter of regret that, although applied to, the Baroda Railway Company has not, either this year or last, sent in any report of the position of that line.

ELECTRIC TELEGRAPH.

At our last Annual Meeting, great hopes were expressed that, in a few months, telegraphic communication *viâ* the Red Sea and Kurrachee would have been successfully established, and the satisfactory laying of the cables seemed fully to confirm those anticipations; but, unfortunately, a very few months sufficed to prove that marine telegraphy is yet in its

infancy, and there seems now but little immediate prospect of the expected communication being effected.

In India, considerable extensions have taken place, and the old temporary lines are being gradually replaced, by others of a more permanent and durable character.

The appreciation by the public of the great convenience of this form of communication is evidenced by the great increase in the total number of private messages; no less than 170,566 having been despatched in 1859-60, against 101,164 in the previous year, showing an increase of no less than 68 per cent. This increase is doubtless in a great measure attributable to a judicious reduction in the tariff of charges; but the total revenue, nevertheless, shows a very satisfactory increase, the receipts for 1859-60 having been Rs. 4,23,991, against Rs. 2,83,105; an increase of very nearly 50 per cent. The annual working expenses may be taken at about seven lakhs; so that, at present, the Government may be regarded as paying three-sevenths of the cost of working, and the public four-sevenths. Considering the short period that the electric telegraph system has been in use in India, this statement must be regarded as eminently satisfactory; and it would seem by no means unlikely, that in a few years the payments, by the public, will more than cover the working expenses.

It would have been extremely gratifying to your Committee, if they could have taken leave of the subject without having to express other than unqualified approbation; but there can be no doubt, that in some

sections, particularly on the line between Calcutta and Bombay, great irregularities prevail, which your Committee cannot help attributing to corruption of a very extensive nature. They have therefore called the attention of the present Superintendent, Captain Murray, to the subject, and it is to be hoped that before long we shall see a mitigation of this very serious evil.

Sir William O'Shaughnessy having left India, your Committee took the opportunity of his departure to express to him their great satisfaction at the energy and application that had in so short a time covered India with a net-work of wire extending almost 11,000 miles. The major part of Sir William's Report for 1859-60 will be found in Appendix A, and will well repay perusal.

MAIL COMMUNICATION WITH EUROPE.

The Contract of the P. & O. Company has been satisfactorily carried out during the past year, notwithstanding an unusual number of accidents; and your Committee have to express their satisfaction that the increase in the number of passengers justifies and necessitates the employment of more powerful steamers. Some dissatisfaction has been expressed at the frequent and sudden postponement of the departure of the mail steamers to Suez, and your Committee trust that the presence of Mr. Ritchie in London may facilitate arrangements by which these delays may be rendered unnecessary, by so timing the departures in England, that the inward mail may be deli-

vered several days before the departure of the outward one.

The gradual extension of railways, and the rapid rise in the trade of this port, lead to the conviction that, before long, Bombay must become the centre of postal communication for all India; and your Committee trust, that before the next Annual Meeting of the Chamber, a weekly communication between this port and Europe will have been established.

COTTON CULTIVATION.

The East India Company's praiseworthy experiments for the purpose of introducing the cultivation of American Cotton into India have been at length brought to a close.

They began in 1788, and have continued almost uninterruptedly for seventy-two years, at a total cost of not less than thirty-five lakhs of rupees (£350,000), and, with one exception, may be regarded as having resulted in signal failure. The energies and intelligence of Governors, Collectors, Commissioners, American planters, and pains-taking amateurs, have successively, and at times simultaneously, been directed to this great national object, but with one result—signal failure.

It is a remarkable fact, that during this lengthened period, while all *large* experiments have failed, small trials, conducted under the immediate supervision of their promoters, have been reported as successful. It is, therefore, evident, that exotic cotton *will* grow in India, if properly managed; and the

causes of failure must be found elsewhere than in the supposed unsuitable character of the soil and climate.

The main causes of failure may be summed up as follows :—

Indifference on the part of the managers and employées.

Ignorance and bigotted opposition on the part of the Native cultivators.

Dilatoriness in forwarding the foreign seed, by which the proper seed-time was allowed to pass over, and the seed became useless.

Wholesale destruction of promising plantations by the inroads of cattle, in most cases doubtless with the connivance of their owners, who, in dry seasons, were not unwilling to fatten their cattle at Government expense.

And lastly, the continual change of Collectors, who took an active interest in the cultivation, for those who took no interest whatever in the matter.

The successful experiments in Dharwar fully bear out all these allegations. Nothing could have been more unpromising at times than the prospects of the cotton cultivation in that district. From 1829 to 1840, numerous experiments were tried in the Deccan and Southern Mahratta Country, and had it not been for the energy of Mr. A. M. Shaw, Collector of Dharwar, the experiments would doubtless have been abandoned. In 1840, he urged the resumption of these attempts, and accordingly, in 1843, we find the very moderate amount of 220 acres in cultivation. In 1846, no less than 30,000 were under American cotton, and the

cultivation was regarded as established; but in 1848, it had dwindled to only 3,600 acres. Since then, the average has steadily increased, and we now have to record the following proportionate cultivation of the two varieties of Native and American cotton:—

Years.	American Kuppas.	Native Kuppas.	Total.
In 1851.....	31,668	223,314	254,982
1852.....	42,647	221,676	264,323
1853.....	28,010	251,113	279,123
1854.....	41,405	252,006	293,411
1855.....	63,298	210,260	273,558
1856.....	50,802	191,196	241,998
1857.....	82,350	196,929	279,279
1858.....	100,813	252,843	353,653
1859.....	105,406	214,993	320,399
1860.....	156,326	230,667	386,993

Your Committee cannot but feel that this highly encouraging result is due to the energy and perseverance of one individual, and they feel satisfied that similar exertions elsewhere would have led to similar results.

It must not, however, be supposed, that your Committee would therefore urge Government to continue these costly experiments, as it must be regarded as but a questionable success, after all, that in seventy-two years, one individual has been found capable of bringing his exertions to a practical issue.

Should the experiments be renewed, it is more than probable that the same listlessness would prevail, and the result would be equally discouraging. Your Committee, however, deem it their duty to point out

the causes that they believe to have operated against India taking up its just position as a cotton-producing country.

The cultivation will now be left to its own natural development, and as it may be presumed that no one will engage in it who does not intend to pursue it with intelligence and industry, a more satisfactory account may be expected in future years.

The correspondence that will be found in Appendix B reveals a more signal series of failures than perhaps any previous year has done, and to read them would almost induce the belief that success was simply hopeless; but your Committee have the satisfaction of informing you, that a greater number of applications have been made for seed than hitherto, and *private* inquiry seems now fully directed to the subject.

It is matter of particular gratification, that many gentlemen engaged as engineers on the railways now under construction in the interior have applied for seed, and are pursuing their experiments on a small scale. It is to be hoped that some success will attend their efforts; and should this be the case, the year of the final abandonment of the Government experiments may not improbably be the commencement of an entirely new era in the history of this important staple.

In making the foregoing remarks, your Committee would disclaim any intention of implying that the Government expenditure has been absolutely useless: on the contrary, they regard it as in the highest degree beneficial, in having constantly kept the subject before the public.

The following gentlemen have applied for and received American or Egyptian seed :—

J. D. Inverarity, Esq., Commissioner in Scinde.
Robert Watson, Esq., Nagpore.
Dr. Forbes, Dharwar.
Theod. Kleinknecht, Esq., Canara.
Captain J. Davies, Berar.
Dr. Birdwood, Poona.
W. M. Hearn, Esq., Belgaum.
G. DeGacher, Esq., Oomrawuttee.
Captain H. Davies, Kaira.
Major W. W. Anderson, Kattiwar.
J. T. Lowry, Esq., Coimbatore.
J. H. Coates, Esq., Kurrachee.
Charles Brady, Esq., Dhanoo.
Henry Victor, Esq., Hurdah.
S. C. Grant, Esq., Nassick.
R. C. Rowlands, Esq., Bombay.
Nusserwanjee Bomanjee, Esq., Nowsaree.
Goolabchund Luxmeechund, Esq., Bombay.
Hormusjee Merwanjee, Esq., Bombay.

The Egyptian seed received direct by steamer from Egypt has turned out all that could be wished, almost every seed having vegetated, and the plants in all cases are now strong and healthy. A remarkable circumstance, however, has been observed, regarding the American seed, viz. that although perfectly good in March, when it reached Bombay, it has been found in June to be next to useless, not more than one per cent. of the seed having come up. It is probable, therefore, that the vitality of American seed may be limited to the period necessary for its reproduction in the United States, where the sowing is completed in April. It is by no means improbable, that this simple

circumstance may be one of the chief causes of the almost general failure of the American cultivation.

Before leaving this subject, attention should be called to Dr. Forbes's newly invented cottage and power-churkas, upon which very favourable opinions were recorded by some of the Members of the Chamber. These opinions are fully confirmed by recent reports from Manchester, and it is now to be hoped that one great obstacle to an increased supply of cotton from India will ere long be removed.

Your Committee will look with much interest for the reports of the experiments now carried on by private enterprise, and trust that their anticipation of success will not be disappointed. (See Appendix B.)

COTTON FRAUDS.

Information was furnished to the Chamber by Messrs. Grey & Co. of an attempted fraud by the use of false stamps, and your Committee intimated their readiness, on the part of the Chamber, to give every assistance in the prosecution of the offenders; but, upon investigation, it was not deemed probable that a conviction would have been obtained, and the matter was therefore allowed to drop. The correspondence will be found in Appendix C, and will serve to place Members on their guard against similar attempts at fraud. (See Appendix C.)

WOOL TRADE.

Some interesting papers, referring to the Wool Trade in Beloochistan, have been received from the Commis-

sioner in Scinde, and circulated among the Members of the Chamber. The Commissioner draws the attention of the community to the carelessness and adulterations practised in the preparation of this article, and recommends Europeans employing agents up-country for the purpose of purchasing wool direct from the owners of the flocks.

These papers have also been furnished to the Chamber of Commerce at Kurrachee, whose Members will doubtless do all in their power to stimulate this important and rapidly increasing article of export. From hence, it is not likely that any direct action can be taken in the matter, as the difficulty and delay inseparable from the establishment of distant outstations must inevitably render all such attempts abortive.

A sample box of Merino Wool, the produce of the flock referred to in the last Report of the Chamber, was received from the Commissioner of Customs, and forwarded to London for report and valuation. The report has lately been received, and is highly favourable ; the wool, in its crude and dirty state, having been valued at 1*s.* 7*d.* to 1*s.* 8*d.* per lb., and, if properly washed before shearing, the article would probably have realised 2*s.* 2*d.* per lb. (See Appendix D.)

INDIGO.

A sample of Indigo, the produce of Scinde, with particulars of cultivation, was received from the Commissioner in that province, and was duly reported on by the Chamber. The expense of production appears

small, and there would seem some prospect of its cultivation being extended to that part of India. (See Appendix E.)

YELLOW WOOD.

A sample of a Dye-Wood, the produce of Quilimane, in Mozambique, and resembling Fustic, was sent to the Chamber by Mr. F. A. DeCarvalho, of this place, and was forwarded to London for report and valuation. Its value is reported to be, if properly freed from sap, £6 to £7 per ton. (See Appendix F.)

FLAX CULTIVATION.

Your Committee have been in communication with the Leeds Chamber of Commerce on this subject; but until Europeans acquainted with the proper preparation of the article undertake the cultivation, there appears no prospect of anything being done to add this important commodity to our staples. (See Appendix G.)

LICENSE BILL.

At the instance chiefly of this Chamber, a Public Meeting was held at the Town Hall, on the 10th of October 1859, for the purpose of opposing the further progress of this Bill. The Meeting was most numerously attended by all classes of the community, and various resolutions condemnatory of the measure were unanimously adopted. It was there resolved to petition the Legislative Council and both Houses of Par-

liament on the subject, and Mr. J. S. White, Barrister-at-Law, kindly undertook the preparation of these documents.

The petitions to Parliament, signed by great numbers of all classes, were forwarded by Mr. Tristram, who presided at the Public Meeting, and were presented in the House of Lords by Lord Overstone, and in the Lower House by Mr. Robert Wigram Crawford.

The thanks of the Chamber were presented to Mr. J. S. White for his able and gratuitous services on this public occasion.

The petitions to the Legislative Council of India and to the Houses of Parliament will be found in Appendix H.

STAMP ACT.

Many of the Sections and Clauses of this Bill, as originally brought before the Legislative Council, appearing to your Committee to be peculiarly injurious to the interests of commerce, they lost no time in protesting against the obnoxious portions of the measure; and they are glad to observe, that in the Bill recently passed, the suggestions of this Chamber have been, to some extent, adopted, though many of its clauses are still calculated to impede commerce. (See Appendix I.)

CUSTOMS DUTIES.

Throughout the year, this subject has occupied much of the attention of the Committee, and they have done what they could towards putting this important matter on a more equitable footing than formerly.

At the end of last year, the Committee received from Mr. Spooner a communication relative to articles on which 20 per cent. duty was levied, handing a revised list of the same received from Calcutta, accompanied with some remarks of his own as to several of the items, and asking the Committee to give him their opinion. This was done by your Committee, and they recommended various alterations, which were approved of by the Government; but before they could be carried into effect, the 20 per cent. duties were abolished in Calcutta, and other changes made, which rendered a thorough revisal of the whole tariff subject requisite.

On the 14th May last, a communication was received from Government, asking the Committee to nominate three Members of the Chamber to sit on a Committee to be appointed by Government, for the revision of the Bombay Tariff; which was complied with by the nomination of Messrs. Henry Scott, George Hamilton, and A. C. Gumpert, as the representatives of the Chamber.

There appearing to be a desire on the part of the Supreme Government to thrust the Calcutta Tariff, with its many objectionable features, upon us, in the place of the simpler and more equitable system which prevails in Bombay, your Committee directed their efforts not merely to oppose any such innovation, but to retain the principle upon which the Bombay Tariff is based, in all its integrity, and to advocate its extension to the rest of India. Your Committee have since had the satisfaction of observing that the principle of the

Bombay Tariff has been recognised, by the Secretary of State for India, as being probably the most equitable that, under all circumstances, can be devised.

Early in July it was intimated officially to your Committee, that Mr. Spooner, Commissioner of Customs, would proceed to Calcutta, to join a Committee there in preparing a uniform Tariff for all India; and, at the same time, the Chamber was invited to nominate one of its Members to represent its interests on the occasion, and also to furnish the Bombay Government with its views generally, upon a question of so much importance to the mercantile community.

This matter was brought before a Special Meeting of the Chamber in July, when it was resolved, that while the Chamber did not deem it necessary to depute one of its Members to represent it in Calcutta, Mr. Spooner being acquainted with the views of the mercantile community, and possessing their full confidence, a very strong representation should be made, to our Government here, of the opinion of the Chamber that the assimilation of the Tariffs at Calcutta and Bombay was neither practicable nor desirable. This resolution was conveyed to the Bombay Government by your Committee in terms of their letter No. 82, which will be found in Appendix K.

Mr. Spooner, who has just left this for Calcutta, has been frequently in communication with your Committee on subjects connected with tariff arrangements, and it has afforded to the Committee much pleasure to furnish him with every information in

their power whereby he may be enabled to demonstrate the superiority of our Bombay system over that in force at Calcutta, and to resist the proposed measure for fixing a uniform Tariff Valuation for all India. (See Appendix K.)

PAPER CURRENCY.

This important subject has been so recently brought before the Chamber, and been so fully discussed by many of the Members, that it is unnecessary to comment further upon the proposed measure. The whole of the minutes have been forwarded to the Local Government, and a copy sent by them to the Supreme Government. Your Committee trust, therefore, that the representations of this Chamber will receive due consideration at the revision of this measure by the Legislative Council. (See Appendix L.)

SUPPLY OF VEHAR WATER TO THE SHIPS IN HARBOUR.

Your Committee, having been applied to by the Municipal Commissioners for suggestions as to how the above very desirable object could be best carried out, after carefully considering the subject, reported to the Commissioners in reply, that they recommended that the water should be led into proper reservoirs at the different bunders by the Commissioners, at their own expense; that the right of supplying the shipping from each of the bunders should be let from time to time by public auction, the lessee paying nothing for the water beyond the premium bid at the

auction, but binding himself to have always available the means of supplying the water to tanks or ship boats at the bunders, and to supply water at all times on demand at a rate not exceeding a maximum, to be fixed. Your Committee, further, urged on the Commissioners the importance of taking steps in the matter without delay, so as to bring the great boon of a plentiful and cheap supply of pure water within reach of the shipping as soon as possible.

Although the Commissioners did not carry out to their full extent the recommendations of the Committee, still, as far as regards its main features, their plan was adopted, and the Committee have to notice the gratifying result that water of a much superior quality is now supplied to the shipping by the Commissioners' lessee. (See Appendix M.)

STRIKE OF CARGO BOATMEN.

In the month of February last, owing to a vexatious restriction being placed by the Master Attendant's Department on the customary license allowed to cargo-boats, in hanging astern of ships loading or discharging, the Natives interested in cargo-boats one and all struck work, and refused to do any more business till the obnoxious rule was rescinded. The result was a total interruption to trade for several days, resulting in very serious inconvenience and loss to those connected with shipping. Your Committee, being fully alive to the serious consequences which a continuance of such a state of things would necessarily entail, took active steps in the matter, and tried their utmost to

induce the Master Attendant's Department to agree to a very reasonable compromise of the matter in dispute, which they had previously got the owners of the cargo-boats to assent to; but without success. They were then obliged to apply to Government direct on the subject, who at once instructed the harbour authorities to act on the Committee's suggestions, which being done, the strike was at an end, and business was resumed.

Your Committee, during its tenure of office, has not had under its immediate consideration the question of harbour management, as they considered it desirable that the new system lately inaugurated should have a fair trial before any further discussion of the question; but they would earnestly call the attention of their successors to this subject, as the existing system has now been working long enough to judge of its fruits; and the Committee are of opinion that it admits of very considerable improvement. An arrangement whereby the authorities entrusted with the harbour management can, either through want of commercial knowledge, or from want of consideration and foresight, bring the trade of this great port to a stand-still, as in the case cited above, and maintain this state of things in the face of the remonstrances of those best able to judge of the consequences of the act, cannot surely tend to the promotion of the public interests or the benefit of trade. (See Appendix N.)

FALSE PACKING OF PRODUCE.

The prevalence of frauds of this nature, whereby

an unprincipled shipper obtained an undue advance on produce, by representing it to be of good quality, whereas it was entirely worthless, threatening to become of serious importance as affecting the mercantile community, your Committee determined to take steps to check the system, and accordingly, having, through the able and willing assistance of Mr. Forjett, detected a case of packing of rubbish wool at the Hydraulic Screws, where it was being pressed for export, they determined, if possible, to bring the culprit to punishment. The wool was watched, by their orders, and each step, from its introduction into the Press Company's premises to its conveyance on board ship, carefully noted. Means were taken, at the same time, by the Committee, to ascertain to what house the shipper applied for an advance, and, if possible, by timely warning, to prevent such advance from being made. In these efforts, the Committee were successful, and they ascertained that Messrs. W. J. Morgan & Co. had been applied to for an advance on the wool, a sample of good wool having been shown to them as a fair specimen of the shipment; whereupon the Committee determined, in concert with Mr. Morgan, to prosecute the shipper criminally; and as the prosecution was undertaken for the public benefit, Mr. Morgan having been warned in time to prevent his giving the advance, the Committee undertook, for the Chamber, to bear the legal expenses. As the case went on, a most ingenious net-work of villany was exposed, and circumstances came to light which led to the apprehension of several parties, including the notorious

Madho Morar, on a charge of conspiracy. After a long trial, a conviction for conspiracy was obtained against Madho Morar, and a severe sentence of imprisonment and fine passed on him. Your Committee believe that this man, being well known to the public as one of the most bold and successful thieves in Bombay, was the prime mover and organiser of the greater part of these frauds, and, in bringing him to punishment, a great blow, it is believed, has been dealt at the system; as, either from the fact of their chief being in prison, or, as is more likely, from the knowledge that no mercy would be shown in case of detection, and the greater likelihood of discovery and conviction, owing to the combined energetic action of the police and the mercantile community, no late cases of such frauds have come to the knowledge of the Committee. The actual shipper of the wool was acquitted, on some technical point, but the Committee believe that, in the punishment of Madho, the real originator of this transaction, and of many others of the same nature, was brought to account.

In the course of the proceedings, it having transpired, that at the Hydraulic Press Company's screws the manager was in the habit of screwing such undoubted rubbish without question, your Committee felt it to be their duty to warn shipmasters and others, by public advertisement, against bales screwed at that establishment.

These screws have now passed into other hands, and the Committee have had pleasure in receiving from their new owners a written assurance that it is

their intention to check and discountenance, by every means in their power, such disreputable practices.

FIRES AT COLABA.

In the month of May last, several very alarming fires broke out among the large piles of cotton stored on the Colaba Land Company's Ground at Colaba. They occurred nearly simultaneously, at several points, on the storing-ground. The attention of the Committee was naturally turned to a matter which threatened to involve the interests of the mercantile community to a serious extent. A report having got abroad that the fires were caused by the application, by the Great Indian Peninsula Railway, of some inflammable substance to the dokras conveyed by their line, for the purpose of marking them, your Committee at once communicated with the Manager of the Railway on the subject; but from what he said in reply, as well as from after investigations by the Committee, there seems to be no ground for supposing that anything done by the Railway Company was the origin of the fires. It appears more probable that they were the work of incendiaries, though no distinct proof of this has been obtained, and it is difficult to assign a motive for so very heinous a crime. The Insurance Companies considered it to be their duty to offer a reward of Rs. 1000 for the discovery of the culprits, and this, combined with additional rewards offered by the Screw Companies, probably contributed to put a stop to the practice, through fear of discovery, as no fires took place after the advertisements offering these rewards.

The amount of property destroyed was not great, considering the circumstances ; and the thanks of the public are due to the establishments of the Colaba and Apollo Press Companies, for the useful assistance rendered by them on the occasion. The Committee would remark, that the military authorities did not see fit to send any troops to assist in putting out these fires, though very important interests were at stake, and the services of a drilled body of men, both in keeping order, and rendering organised assistance in extinguishing the flames, are very valuable on such occasions.

The Committee have received from Colonel Glasse, Inspector General of Ordnance and Magazines, some reports of authentic cases of spontaneous combustion of oil-rags used in the Government arsenals, when accidentally exposed to the sun's rays ; these will be found in Appendix O.

PAYMENT OF PASSAGE-MONEY FOR TROOPS.

The Bombay Government having felt dissatisfied with existing arrangements in this respect, whereby it sometimes happened that the number of troops embarked fell short of the number named in the return of the Quartermaster General on which passage-money was paid, and Government were thus called on to pay for more men than were actually shipped, the opinions of the Quartermaster General and the Commander in Chief were taken as to how the matter could be remedied ; and by the advice of the former, the Government approved of a change in the mode of paying passage-

money, by which the ship was to receive payment for the number of men included in a return to be made by the Quartermaster General's Department only one week previous to the sailing of the vessel; and the proposed change was submitted to the Committee of the Chamber, to see if it met with their approval. The opinion of the Committee was unanimously to the effect that such an arrangement would be unfair to the interests of shipowners, as under it the passage-money to be earned by the ship might fall far short of the amount originally contemplated when the contract was made, and also, because the Captain, having to make arrangements for victualling before receipt of the return, might have laid in supplies for a much greater number of men than were finally allotted to him, and might thereby incur great loss. The views of the Committee having been confirmed by the Members of the Chamber, whose opinions were ascertained by a general reference, the Committee replied to Government, that the arrangement proposed did not seem to them to be an equitable one, and could not meet with their approval.

The Government then proposed, in order to come to some definite arrangement, that a Committee should be appointed, consisting of the Commander in Chief of the Indian Navy, the Deputy Quartermaster General, and a Member of the Chamber of Commerce, who should consult together, and submit their views to the Governor in Council. To this your Committee agreed, and the Deputy Chairman was appointed to represent the Chamber. The result

of their deliberations was a recommendation to Government that passage-money for troops should be paid under the following arrangement. The Naval Department, at the time of acceptance of a tender, to state what number of troops would probably be allotted to the ship. One week before the vessel sailing, a final return to be sent to the ship's agents by the Quartermaster General's Department, detailing the actual number of men to be embarked, and passage-money to be payable on the number included in this return. But in the event of the return including less than 97 per cent. of the number originally notified to the agents for the vessel by the Naval Department at the time of acceptance of the tender, then passage-money in full to be payable to the ship for any number under 97 per cent. in the said return.

On the other hand, the Government not to be liable for passage-money on more than 97 per cent. of the original number stated by the Naval Department, provided it appears by the Quartermaster General's return that the full number is not to be embarked.

The ship will thus always be able to count on 97 per cent. of the number included in the first return given at the time of acceptance of the tender, and will be able to make arrangements accordingly.

Your Committee consider the understanding an equitable one, and that the interests of shipowners are sufficiently protected under it. The Government passed a resolution on receipt of the recommendation, that its terms should have a fair trial, and that, for

the present, passage-money for troops would be paid according to the above rule. (See Appendix P.)

WEEKLY TRADE RETURNS.

It will doubtless be in the recollection of many of the Members, that these Weekly Trade Returns were a constant source of annoyance and irritation to the community, in consequence of the great, and apparently unnecessary, delay in their production. This delay was alleged by the Chamber to have been purposely caused by the Reporter General's Department at the Custom House, where one of the Assistant Commissioners was interested in the issue of a somewhat similar, and consequently competing publication. The difficulty of dealing with the matter was further complicated by the circumstance that a former Secretary of the Chamber had disposed of the good-will of a similar publication to the Assistant Commissioner's predecessor, and thus there was something of the nature of a vested interest in the way of a settlement of the question.

Your Committee have now the satisfaction to report, that having again represented to the Commissioner of Customs that the interests, not only of the Members of the Chamber, but those of the public at large, suffered by the competing issue of rival publications, directions were given that the minor print prepared by the Assistant Commissioner should be abolished, and a staff adequate to the increased labour devolving on the department should be employed.

The effect of this arrangement has been, that while

formerly the Weekly Trade Returns were not unfrequently 45 days in arrears, they are now usually delivered in from 12 to 15 days, and complaints on the subject have ceased. (See Appendix Q.)

MHYJEE AND SAMLAJEE FAIRS.

The voluminous reports of the Mhyjee Fair continue as interesting as in former years, and exhibit a considerable increase of transactions over the previous years. That of Samlajee was suspended during 1857 and 1858, in consequence of the mutinies, and, probably from this cause, the amount of business was less than formerly.

The mercantile transactions at these fairs, excluding hoondies, were follows :—

In 1860, at Mhyjee.....	Rs. 32,64,058
In 1859, at Samlajee.....	7,95,700
Total....	Rs. 40,59,758

Against,—

In 1859, at Mhyjee.....	Rs. 28,26,716
In 1856, at Samlajee.....	9,93,151
Total....	Rs. 38,19,867

Showing an increase last season of nearly two and a half lakhs of rupees. (See Appendix S.)

LORD ELPHINSTONE.

On the retirement of the late lamented Lord Elphinstone from the Governorship of this Presidency, a post which he had filled during the most stirring times that India has perhaps ever witnessed, the Chamber resolved that an address should be presented to His Lordship, expressive of their sense of the courtesy and consideration displayed in the communication of Government with the Chamber. The address was presented by your Chairman, and will be found, with His Lordship's reply, in Appendix T.

BROKERAGE ON ENGAGEMENT OF FREIGHT.

The pressure of the charge of four annas per ton on freight to Europe, irrespective of the rate of freight, having been found particularly onerous on shipowners during the low freights prevailing about twelve months ago, the opinion of the Members generally was taken as to the desirability of adopting a fixed percentage on the amount of freight earned. With few exceptions, the Members approved of the change; and, at a Special Meeting held in November, it was resolved to adopt one per cent. as the rate in future on freights to all parts of the world.

Your Committee, however, having shortly after been apprised that this resolution had not been supported in practice by all the Members of the Chamber, and unanimity of action being essential to its success, a Sub-Committee was appointed at the General Meeting held in July, to confer with the brokers,

whose co-operation it was important to obtain, and to report to the Annual General Meeting. Their Report is as follows:—

Report of the Special Committee appointed by Resolution of the General Meeting held on the 19th July 1860, to confer with the principal European and Native Brokers, and to endeavour to come to some arrangement mutually satisfactory, and to report to the General Meeting of the Chamber in September, with a view to the final settlement of the question.

The Committee appointed to confer with the Freight Brokers on the subject of the proposed change in the rates of Brokerage, have now to report, that, with but one exception, the Brokers, European as well as Native, view with disfavour the proposed change.

It is evident, that the principle of paying say one per cent. on the amount of freights, as in Calcutta and other places, could only be established by the adhesion of every European firm, whether Members of the Chamber or not; and, in the present state of opinion on the subject, this unanimity can hardly be calculated upon.

With regard to the allowance on Freights to China and elsewhere in the East, although nominally Petty Brokerage, your Committee regard it rather in the light of a discount on the Freight which usually finds its way into the pockets of the principals, or is allowed as a perquisite to their establishment. In the case of charters for China, it may be looked upon as the profit of the Native Charterer. Any alteration, therefore, in the system now prevailing, would affect the question of Trade Allowances rather than that of Petty Brokerage.

FUNDS OF THE CHAMBER.

The balance to the credit of the Chamber on the 31st August amounted to Rs. 5,038-2-71, against Rupees 5,221-3-59 at the same period last year.

CONCLUSION.

The subjects dealt with by your Committee during their term of office have been unusually numerous and interesting, and they have to express their great satisfaction at the attentive consideration with which their representations have been received by Government The references to the Chamber by the mercantile community have also been numerous, and have received the careful attention of the Committee. The strength of the Chamber has been increased by the accession of several new Members, and its funds continue in a satisfactory condition.

Your Committee have to tender their best thanks to the Members generally for the interest taken by them in the elucidation of the numerous questions that have been brought before them.

In relinquishing their charge to their successors, your Committee believe that the efficiency of the Chamber, and the mutual co-operation of its Members, were never greater that at present; and they look forward to its maintaining a long career of extending influence and usefulness.

APPENDICES.

APPENDIX A.

ELECTRIC TELEGRAPHS.

No. 57.

From Captain R. MURRAY,
Deputy Supt. Electric Telegraphs, Western India,
To the CHAIRMAN of the CHAMBER OF COMMERCE,
Bombay.

Dated Bombay, 9th June 1860.

SIR,—Agreeably to the instructions contained in the 2nd paragraph of the enclosed letter from the Superintendent of Electric Telegraphs in India, to my address, I have the honor to forward the extracts and returns therein referred to, and to request the favour of these being returned to my office when no longer required.—I have the honor to be, &c.,

(Signed) R. MURRAY, Captain,
Deputy Supt. of Electric Telegraphs, Western India.

No. 310.

ELECTRIC TELEGRAPH DEPARTMENT.

To Captain R. MURRAY, B.A.,
Deputy Supt. in India, Western Division, Bombay.

SIR,—I forward herewith, for your information, extracts from my Annual Report for the year ending the 30th April last.

2. As it is of much importance to the mercantile community to be made acquainted without delay with the state and progress of the department as shown in these reports, you are instructed to permit the Chairman of the Chamber of Commerce to peruse the documents now forwarded, and to make such use as he thinks fit of any paragraphs which he considers of interest to the public.—I have the honor to be, &c.,

(Signed) W. B. O'SHAUGHNESSY,
Supt. Electric Telegraph in India and Ceylon.

Head Office, Ootacamund, 28th May 1860.

ELECTRIC TELEGRAPH DEPARTMENT.

Extracts from the ANNUAL REPORT *for the Year commencing 1st May* 1859 *and ending 30th April* 1860.

NEW LINES CONSTRUCTED.

1. I.—From Benares to Patna, *vid* Buxar and Arrah. This line joins that from Patna to Burdwan, by Rajmahal, and thus affords a second line between Benares and Calcutta.

II.—From Raneegunge to Bancoora and Midnapore, giving an alternative line from Calcutta to the East Coast and Madras, avoiding the very precarious river crossing at Diamond Harbour, (where our cables are incessantly destroyed by ships' anchors,) and the unhealthy station and neighbourhood, Kedgeree.

III.—From Dacca to Chittagong and Coxe's Bazar, in extension of the line to join those in Pegu, with which it will be connected on the arrival of 100 miles of cable now on the way from England.

IV.—Branch lines from the East Coast main line to Vizianagrum, Coconada, Masulipatam, and Calingapatam; and from Mooltan to Dehra Ismail Khan in the Punjaub.

2. Lines are in progress from Chittagong to Prome, from Paumben to Tuticorin, from Shajehanpore to Bareilly, and from Moradabad to Nynee Tal.

3. In all there are now 10,994 miles, and 136 offices, open for public correspondence; several offices have been closed

during the year, as no longer necessary for military or political purposes. The line from Cawnpore to Calpee has been taken down for the same reason.

4. Great progress has been made in the erection of iron posts, and other durable supports, all over India.

5. A second wire has been put upon the posts from Jelasore to Balasore, on the East Coast, and a second wire is in course of suspension between Allahabad and Benares.

6. In anticipation of the successful placing of the submarine cable from Kurrachee to Aden, every exertion has been made to render the line from Kurrachee to Bombay safe and efficient. From Kurrachee to Deesa, three-fourths of the line have been placed on Hamilton's iron posts. Several of our best inspectors have been sent to Scinde and Guzerat, Morse instruments, and an adequate number of well-trained signallers, have been provided for every station, and mounted patrols stationed all along the line. A few interruptions have nevertheless occurred between Nuggur Parkur and Budeena, arising chiefly from neglect on the part of the line inspectors; but these interruptions are insignificant compared with those which have occurred in the submarine cables, which were assumed to be exempt from all liabilities of this kind. The section of the submarine line between Suaken and Aden has been interrupted from the 10th of February to this day, the 10th May, and the whole of the Red Sea line from Suez to Aden has thus been rendered useless.

7. The Hamilton iron posts, of which 40,000 have now been erected, give the utmost satisfaction, and large additional supplies are called for by all our inspectors. The posts require several modifications. The stoneware insulators provided with them have all proved weak and brittle, and their breakage has caused many interruptions. Cross pieces are also required on these posts, to prevent the line wire from falling into contact with the iron, and thus establishing an earth connection, and stopping the transmission of signals.

Decay of the Timber Posts.

8. This was dwelt upon in my last report, and has since been the subject of several official letters. It is beyond doubt, that the mean duration of the whole of our timber

supports is but five years, and that the decay and destruction of the posts, with the expense of the establishments required to preserve and replace them, costs the department at least Rs. 40,000 per month. Measures are now in progress for the supply of iron standards for all India. From experiments made on the mountain lines on very long spans of wire, it is proposed to use very lofty iron masts in the plains, erected at long intervals. Numerous advantages will be gained by this plan, especially as regard great facility for the insulation and erection of multiple lines, and immunity from most of the ordinary causes of interruption.

Multiple Lines.

9. In some localities, it is a matter of absolute necessity to have two or more wires on the same standards. A glance at the map will show several instances of this kind. From numerous and careful experiments, made during the last rains, it has been ascertained that *electrical insulation* is of very small necessity or importance, even when many lines are on the same posts. After the first shower has washed off dust, and the deposits from birds and insects, the subsequent falls of rain cause little or no diversion of currents from wire to wire. Distilled water, as rain is chemically, is, in fact, a capital insulator of voltaic currents of low tension, such as those we use for signalling purposes. The great object with multiple wires is to prevent their actual contact with each other. We are now introducing powerful screw clamps, by which each wire is grasped tightly at every post, so that slipping off is prevented. The double line from Calcutta to Raneegunge, Benares to Allahabad, and Jelasore to Balasore, are all being provided with these clamps, and all other lines will be supplied when clamps arrive from England next season.

10. The lines generally all over India have worked well during the past year, except those within 200 miles of Calcutta in all directions. This subject has been dwelt on in my report, and I then ascribed the failure of the section to sheer neglect on the part of the officers in local charge. On careful official investigation, this opinion has been fully verified. Nearly the whole establishment has been removed to less important circles, or been allowed to resign, or dis-

missed, according to circumstances, since December last. The effect of these measures has been fully successful. The only part of the Bengal circle still working badly is one in which a change of persons has not been practicable. As some proof of the capability of the line, I may mention that we have this season worked frequently direct from Calcutta to Bombay *viâ* Benares, Agra, and Indore—distance by the line 1,600 miles; also from Kurrachee to Bangalore, distance 1,800 miles. Mail messages have been sent in five minutes from Bombay to Agra, 800 miles. On ordinary working days, I have commonly sent messages to Calcutta from Coonoor, on the Neilgherries, in an hour, without interfering with other work. I have had an answer from Simla to a service message from Coonoor in four and a half hours, distance to and from, 4,000 miles by the line.

11. These facts are adduced to show, not what the line ordinarily does, but what it is capable of doing, and what on emergencies it does daily for the public service. It seems, however, to be nearly forgotten in most quarters, that the lines were almost totally destroyed in the North-Western Provinces, and from Agra to the Nerbudda, in 1857, and the signallers murdered or dispersed; that the Madras and Bombay lines had, from want of due supervision, fallen into total disorganisation;—that, in fact, in January 1858 we had not more than 2,500 miles of line and 50 offices in efficient operation. We have now 11,000 miles of lines and 150 offices (including those open in the monsoon only) open, and working well,—a task accomplished in two years and four months. Besides the construction of the lines, the signalling staff had to be created from totally untrained persons. All this has been done with fair success, to the infinite credit of my subordinate officers, however infinitesimally small may be my own share in the result.

The Morse System of Signalling.

12. Since my last report, this system has been extended to the South-East Coast and Ceylon, and the whole Central India line from Bellary to Mirzapore, *viâ* Hydrabad, Nagpore, and Jubbulpore. Morse instruments and signallers have also been supplied to the stations of Umballa, Simla, Lahore, Murree, and Mooltan; and an office worked on this system has accompanied the Camp of the Governor

General in His Excellency's recent progress through Upper India.

13. In nearly all the offices, the signallers now receive perfectly by *ear*, and reading from the paper tape is given up. The saving effected by discontinuing the use of the tape amounts to at least Rs. 30,000 per annum, while two-fold greater accuracy is attained in our work.

14. Of the 74 Morse Assistants from England, there were 65 in the department at the date of my last report. Since then, three have returned to Europe from ill health, four have retired on the expiration of their three years' agreement, and seven have been permitted to resign, or to accept employment in other departments of the public service. There now remain 52.

15. Ample proof is afforded by its details of the just and liberal treatment experienced by every one of this class who deserved promotion and reward, and that they have had a full proportion of the prizes in the department. Those who have not succeeded, have either to blame themselves, or have proved inferior to competitors on the list of the original local establishment.

16. As signalling by ear is now universally adopted in America, as well as in India, successful contrivances have been introduced in both countries for the simplification of the Morse instruments. The clock-work and roller mechanism, for the paper tape, are now discarded. For use in India, I have made up a very simple and cheap instrument, which works as well as the best instruments from Berlin, at less than one-tenth of their cost. These modified instruments have, moreover, the great advantage of being dismounted, cleaned, repaired, and set up, without risk or difficulty. A complete set is made up daily in the Bangalore workship, under the able management of Mr. Faulkner. His work is quite equal in finish and solidity to that of the best Prussian instruments.

17. The School for Signallers, opened temporarily at Coonoor, has proved fully successful. It has in eleven months supplied 58 signallers,—to the department of the Bombay Circle, 9; Madras, 12; Bengal, 27; East Coast, 4; and Central India lines, 6; there remaining under training 22, and 12 more are on the way to Coonoor.

The total expenditure on this school for the year has been,—

Pay of Teacher, Assistant Teacher, Probationers, Artificers, and 2 Lascars ..Rs.	9,803	6	3
Rent	1,360	0	0
Stores	27	4	0
Return conveyance to Bangalore eastward, and Calicut westward	1,155	9	0
Repairs of line to Ootacamund	82	13	6
Total....Rs.	12,429	0	9

For 60 well-trained lads; being on an average Rs. 200 for each. The young gentlemen brought from England cost the Government over Rs. 1,600 each by the time they landed in India. Mr. Knop deserves my best thanks for the valuable service he has rendered in the management of this school. He has been promoted to a second class inspectorship, on Rs. 200 per mensem, with my promise for his retaining permanent charge of the Ootacamund Office when the Coonoor School is closed.

Local Schools.

18. In connection with this subject, I have to observe that much practical difficulty is experienced in supplying India generally with signallers drawn exclusively from the Madras Presidency. The Coonoor School having accomplished the general object for which it was formed, should now, I think, be retained for the supply of signallers to the Southern Division only. If 12 pupils are always kept in training, every future emergency can be provided for. I would recommend a similar local school to be formed at Barrackpore, limited to 12 or 20 pupils, and practising on the local line to Calcutta; and a third class at Poona, of the same number, practising on the local line to Dapoorie. I most earnestly advise that the entertainment of *probationers* at any station but the three named be peremptorily forbidden. A *probationer* in a regular telegraph office is a dangerous nuisance. As soon as he learns the alphabet, he is made the fag of the advanced hands, and set to do their work before he can read a single signal. Nine-tenths of the errors and delays in the transmission of messages in former years arose from this cause.

STAFF OF THE DEPARTMENT.

19. This has been modified, and reorganised as follows, on my recommendation.

20. Three officers of superior rank have been appointed to the immediate charge of the Western, Southern, and Eastern Divisions, respectively. The Deputy Superintendents of Circles are placed under the direct control of these gentlemen, who are, again, subordinate to the Chief Superintendent.

21. The staff now consists of,—

1 Chief Superintendent.

3 Divisional Superintendents:

Eastern Division, Major C. Douglas.
Western Division, Captain R. Murray.
Southern Division, Mr. J. T. Blissett.
With charge of Madras Circle.

Deputy Superintendents of Circles.

Mr. H. P. Owen	Bengal.
Mr. Wickham	Bombay.
Mr. J. E. Todhunter	Indore.
Mr. A. Cappel	East Coast.
Mr. G. H. J. Smith	Dacca.
Mr. G. O'Donnell	Pegu.
Mr. J. H. Nowill	Central India.
Mr. C. Galbraith	North-Western Provinces.
Mr. B. C. Bailey	South East Coast, and Ceylon.

Salaries Rs. 400 to Rs. 500; with 5 Assistant Deputy Superintendents, salaries Rs. 300 to Rs. 350.

Seventeen First Class Inspectors, salary Rs. 250; 32 Second Class Inspectors, salaries Rs. 150 to Rs. 200; and 36 Third Class Inspectors, salary Rs. 100, per month.

The total sanctioned cost of this establishment is Rupees 21,250 per month.

22. A complete list of all persons employed in the establishment, made up to the 31st March, is appended to this report, showing the stations, duties, and salaries of all persons drawing over Rs. 10 per month.

23. An analysis of this list gives the following results:—

Superintendent in India and Ceylon	1
Deputy Superintendents, East, West, and South Divisions	3
Deputy Superintendents of Circles	10
Assistant Deputy Superintendents	5
First Class Inspectors	17
Second do. do.	32
Third do. do.	36
Assistant Auditor of Accounts	1
Assistants in Charge of Offices, not Inspectors.	117
Head Signallers	22
Signallers	369
Probationers	102
Sub-Inspectors	2
Overseers	5
Artificers	85
Assistant Artificers	35
Accountants, Clerks, Writers	161
Mounted Line Guards	61
Native Artificers, Tindals, and Lascars	37
Native Overseers (Jemadars)	9
Ditto (Maistrees)	21
Message Examiners	11
Printers and Compositors	13
Superior Workmen	6

Besides line and cable guards, messengers, and office servants of all kinds.

24. Great reductions will be practicable in this list as fast as iron posts are provided for the lines, when one-half our present establishment of line inspectors, artificers, and overseers, and several hundred line guards and mounted patrols, may be discharged. I estimate the saving to be effected in this way at Rs. 20,000 per month (one establishment only). A great number of accountants, clerks, and writers might be discharged at once, with much advantage to the public service. Half of them are worse than useless. But the difficulty of getting rid of these persons is very great. They fasten upon public departments with a tenacity inspired by the enjoyment of sinecures, and the prospect of pensions. To attempt to dislodge them is followed by appeals to

Government, and outcries about cruelty and persecution; so that the reformer and economist soon finds himself an object of popular execration. All this is very disagreeable, but the duty must still be performed.

25. The total cost of establishment entertained on the 30th of April for all persons drawing more than Rs. 10 per mensem amounts to Rs. 68,810, as shown by the accompanying list. House-rent, the Bangalore workshop, line and cable guards, and peons included, the salaries and wages amount to Rs. 88,121. (*Vide* Return No. 2.)

26. The total expenditure in the department for the financial year under report is shown in the annexed abstract. (*Vide* Return No. 3.)

27. The sketch estimate for the year submitted to Government on the 30th June 1859, and based on the returns from the several Deputy Superintendents, amounted to Rs. 16,55,958-10-0, of which, for construction, reconstruction, (not including the new lines subsequently ordered, or stores from Europe,) and repairs, Rs. 5,57,452-9-0, and for working, Rs. 10,48,506-1-0.

Business transacted during the Year.

28. The results under this head are very satisfactory. Two months before the end of the previous year, we had made reductions in the tariff for messages amounting to 75 per 100 on the mass of our transactions at the time; and in order to prevent the misuse of the lines by public functionaries, cash payment for all service messages was enforced, and the right of precedence abolished, except in very special cases.

29. The effect has been most successful. It should be remembered, that all the great lines had been in operation the previous year, and the total number of offices open actually greater in 1858-59 than in the year under report. The annexed table shows the cash returns in each year and month, for private messages, not including Ceylon, except the balance due to India on the messages between the two countries. (See Return No. 3;—the increase being from Rs. 2,83,105 in 1858-59, to Rs. 4,23,991 in 1959-60; being 49·76 per 100.)

30. The total number of messages sent in all India, Pegu, and Ceylon, was, in 1858-59, *private*, 101,164; in 1859-60,

170,566; showing an increase in number of 68·61 per 100; while the service messages were, in 1858-59, *service*, 56,670; 1859-60, 31,868; the desired reduction in number having been effected most satisfactorily. (See detailed Returns Nos. 5 and 6.) Again, the value of the service messages was, in 1858-59, Rs. 3,64,739; in 1859-60, Rs. 1,20,169.

31. The number of messages sent by *Native* merchants and correspondents during the two years is,—

In 1858-59..... 39,724 messages.
In 1859-60..... 71,554 „

32. This increase is very important: while the European community is comparatively small, and may not be capable of affording a very large increase of business, the Native bankers and merchants, and community generally, can give as much work as the lines can ever perform.

33. The great increase in the *number* of private messages, proceeding, as it does, mainly from the reduction of charges, is still inadequate to account for the actual increase of receipts. The number of messages would have, at most, prevented any actual diminution of the sum to be realised under the former rates. The excess proceeds from the increased length of the messages: instead of being cramped by the omission of auxiliary verbs, conjunctions, and explanatory words, the messages are now given in much greater length. This is clearly shown by the annexed analysis of the lengths of the private messages in each year.

34. In 1858-59, of 101,157 private messages, there were,—

55,299	of words	1 to 16
23,220	do.	17 to 24
14,298	do.	25 to 32
6,099	do.	33 to 48
2,241	do.	49 and over.

while in 1859-60 there are, in 126,939 messages (taken from the returns of eleven months only),—

53,307	of words	1 to 16
37,992	do.	17 to 24
19,549	do.	25 to 32
11,127	do.	33 to 48
4,964	do.	49 and over.

35. The effect on the length of the service messages paid for in cash is the reverse of that caused on the private messages by the abatement of rates. In 1858-59, of 56,672 messages, there were,—

4,864	of words	1 to 16
7,828	do.	17 to 24
10,607	do.	25 to 32
16,876	do.	32 to 48
16,497	do.	49 and over.

While in 1859-60, of 23,687 service messages, there were,—

3,667	of words	1 to 16
4,961	do.	17 to 24
5,037	do.	25 to 32
5,322	do.	33 to 48
4,700	do.	49 and over.

36. The suppression of the abuse of the lines by public functionaries, in the transmission of the prolix messages of the previous years, has, by ridding the line of an enormous amount of work, been equivalent to placing a second set of lines and offices, and a double establishment of signallers and instruments, at the disposal of the general community.

37. Of the 170,566 private messages sent in 1859-60, there were from each circle as follows:—

Circles.	
Bengal and North-West Provinces to Agra	39,315
Bombay	43,228
Madras	31,030
Central India	6,336
Indore	5,491
East Coast	9,871
Ceylon, and South-East Coast	10,766
Pegu	6,513
Punjaub, Rohilcund, and Oude	12,356
Scinde	5,660

Telegraph Stamps.

38. To enable persons residing at places where there are no telegraph stations to send their messages prepaid by post to the nearest telegraph office, special telegraph stamps have

been supplied and distributed all over India for sale at the treasuries and stamp offices. The postmasters and principal civil officers have been supplied with copies of the telegraph map, rules, and polymetrical tables. The system is now just beginning to work; by next year, I have no doubt a large addition of business will flow upon the lines from this source.

Errors, Delays, and Complaints.

39. Previous to May 1859, all private messages on business had to be "repeated" at half price extra. In May, "repetition" was made *optional*. The repetition messages are now not one-fifth of the former number.

40. As repetition has always been considered the best security against errors, it might have been reasonably expected that on its abolition the proportion of errors would increase very largely.

41. In an analysis of 22,657 messages transmitted at repetition price in 1858-59, it was found that 492 messages contained errors, being a proportion of 1 in 46 messages. The 492 messages contained 525,617 words, of which there were 689 erroneous, being a proportion of 1 error in 762 words.

42. In 1859-60, I have ascertained that in 105,893 messages sent in Bengal, Bombay, Madras, the East Coast, Ceylon, Scinde, and the North-Western Provinces, 1,605 contained errors, being 1 message erroneous in every 65. The 105,893 messages contain 2,342,812 words, of which 1,982 are erroneous, being 1 word erroneous in 1,182.

43. These results are far better than I expected, and show a great improvement on the work of the previous year. They have been obtained by a most careful scrutiny, and comparison of the messages. In every single instance, the office in which the mistake occurred, and the signaller by whom it was made, have been ascertained and registered. The registers accompany this report, and may be consulted in the general "complaint office" in Calcutta, by any one who takes an interest in these matters.

44. The errors are, as usual, chiefly in numbers—"six" for "sixty," "fifteen" for "fifty," and the like; names of places, and persons, especially of Natives; "purchase" for "purchased," "insure" for "insured," "ship" for "shipped,"

"about" for "above," "bales" for "sales,"—90 per 100 being the confusion of similar sounds in words of different meaning, or the omission of a letter or syllable. The action of atmospheric electricity, causing the instruments to work, and give articulate sounds while delivering messages, is a common cause of these errors; but, in many cases, they arise from haste or inattention on the part of the signallers. That instances of gross stupidity occur from time to time on the part of signallers and assistants is undeniable. It should be remembered, however, that the process of receiving a telegraph message is one in its very nature liable to the misinterpretation of what is seen or heard. Any one who has had to correct the first proof of an article set up by an East Indian or Native compositor can understand at once how great is this liability to errors, when the same agency is employed to write down from the *dictation* of an instrument, or to decipher its traces and dottings on a paper tape. The true wonder is, that so few mistakes occur. The sufferer by such blunders generally appeals to the press, and cites his case as a specimen of the general working of the department. The conclusion is not just. Nothing is heard or known of the 1,182 words which have been sent correctly, while loud indignation is naturally expressed for the one error in that number.

45. I am unable to present an exact report on the number and nature of delays. My instructions for special returns on this head have not been properly carried out by the Deputy Superintendents. In the rainy season, and in the thunderstorm months, many interruptions occur from natural causes which cannot be prevented; but many gross instances of criminal neglect in the offices have been brought to my knowledge; and I much doubt if this sad drawback to our efficiency can ever be obviated till the Chief Superintendent is invested with the power of summary dismissal of the offenders *without appeal to Government.* If his authority be increased to this extent, and if he performs his duty regardless of anonymous libels and vituperation, he may succeed in reforming this evil, which must otherwise be a constant blot on the department.*

* I receive this day, 17th May, by post, the official copy of a telegram addressed to myself by the Accountant General at Calcutta on the 1st

46. In every case of undue delay, as well as in those of serious errors or non-delivery, a refund of the sum paid for a message is at once made to a complainant, and the assistants to blame are punished as severely as the state of our establishment permits.

47. The sums refunded during the year amount to but a small percentage on our receipts, although we encourage complaints in every way, and although incessant attempts are made to defraud the department by false or frivolous claims.* For the purpose of affording every facility for the investigation of complaints, and the refund of sums fairly claimable, a separate central office was established in Calcutta in December last, in addition to the local offices. In the central complaint office every *through* message sent,† in India and Ceylon, is traced and compared, *whether complained of or not.* No such attempt is made, no such trouble taken, in any other part of the world.

48. A specimen of the weekly return made by the complaint office is annexed, in illustration of the pains bestowed on this branch of our business.

49. Since the opening of the general complaint office to the 30th April, the following refunds have been made:—

For Bengal ..... Rs.	392	3	0
Bombay	69	3	0
Ceylon	41	4	0
Madras	4	10	0
Dacca	4	8	0
Punjaub, Rohilcund, & Oude ..	7	2	0
Total number of complaints .. 154.			
Total amount refunded ..... Rs.	518	14	0

instant. The message never reached me by telegraph. It conveys a "*no demand*" certificate, without which I could not leave India in the steamer in which I have taken my passage. If the head of the Telegraph Department has to complain of such scandalous neglect by his own subordinates, the public must doubtless be still worse served. There is but one remedy for such cases,—the instant dismissal of the culprits, not only from the Telegraph Department, but from the public service.

* This happens chiefly in Bombay, among the Native agents and brokers employed in the opium trade.

† Those passing through more than one telegraph circle.

Total amount refunded in Bengal Division for the whole year..... Rs.	1,479	8	0
Bombay Division.....	1,255	9	0
Madras Division.....	112	0	0
Total refunds ..... Rs.	2,847	1	0

Being Rs. 0-10-8 per cent. on the total receipts of the year, viz. Rs. 4,23,991.

50. I have now only to advert briefly to some miscellaneous matters deserving notice in this report.

Effects of Lightning.

51. I am happy to report again the perfect success of the arrangement for the protection of our buildings, instruments, and signallers from the effects of lightning. The teeth of the brass lightning plates, and the safety coils, described in my last report, are melted in great numbers every day. But of two hundred Morse instruments now in use, only two have suffered injury during the last year. In one of these cases I have reason to believe the safety coil was not used at all; in the second case, which happened at Ootacamund, under my own observation, the *ends* of the coil had been crossed accidentally, so that the flash struck *across*, and did not circulate through the coil. As to the assistants and signallers, they care nothing now about the worst thunderstorms; but the lazy hands make their occurrence a common pretext for stopping work altogether.

Telegraph Act.

52. A revised Act has passed the Legislative Council, to remedy certain defects found to exist in Act XXXIV. of 1854. Several of the alterations are in the phraseology of the Act, rendered desirable by the transfer of the Government of India to the Crown. In Section XI., heavy penalties by fine and imprisonment are assigned to the wilful violation of secrecy, or disclosure of the contents of despatches except under the official order of a Secretary to Government. Section XII. imposes imprisonment and fine for offering bribes to persons in the Telegraph Department, in order to induce such persons to act in a manner inconsistent with their duty.

Workshops.

53. In addition to the workshops at Bangalore and Calcutta, I would suggest that one be established at Poona, for the Western Division. The total cost of the three workshops, materials included, should not exceed Rs. 1,500 to Rs. 2,000 per month. For this sum, the new simplified Morse instruments, lightning plates, safety coils, and battery plates, should be supplied for all our stations.

Audit of Accounts.

54. As this is the last report I shall have the opportunity of submitting to Government previous to my departure to Europe, I think it desirable to state, that since my return to India, in December 1857, to the 11th instant, I have examined and audited the bills for "construction and working" as follows:—

Construction	Rs. 18,33,602	8	4
Working	17,44,868	13	3
Total....	Rs. 35,78,471	5	7

The bills bear dates from February 1857 to March 1860. Total number of bills audited, 12,554. The "construction" bills contain the expenditure for all the new lines put up, and old lines repaired, since January 1857, with many very heavy items in arrears for the lines previously erected. Details are given in the return annexed. (No 4.)

55. As I am about to proceed to England on medical certificate by the next steamer, I have sent the whole of the documents on which the preceding report is based to Major Douglas, the officer appointed by Government to act as Superintendent during my absence, and by whom any more detailed information required by Government or the public will be at once supplied.

56. I venture to add a brief expression of my great satisfaction at the selection of Major Douglas as my successor. I have never met any one in India or Europe who combines in so remarkable a degree the attainments and qualities required for the office: an accomplished electrician, chemist, and engineer, he has the assiduous and indefatigable application to business, and unswerving determination of purpose, without which the Superintendent of this department must fail in the discharge of his duties. I leave it in his able

hands, satisfied that he will introduce every real improvement attainable, leaving unaltered whatever may be good and useful. He is most ably supported by Captain Murray in Bombay, and Mr. Blissett in Madras, and by nearly all the Deputy Superintendents of Circles, of whom Mr. Wickham, Mr. Todhunter, Mr. Galbraith, and Mr. Bailey deserve very favourable mention. A great majority of the "Assistant Deputy Superintendents," and of the "Inspectors of the first and second grades," are well educated gentlemen, who perform their duties with complete success; and among the assistants in charge of offices there are many who cannot be excelled for their skill, assiduity, and good conduct.

57. There is a great future before the Telegraph in India. By perseverance and determination, it should be made the best in the world, inasmuch as it possesses a unity of organisation unattainable elsewhere, with all the resources of the empire to promote its extension and improvement. In two, or at most three, years from this time, the lines should yield a clear profit, and a *uniform minimum charge for messages may then be adopted for all India.* This, with the general use of some simple cypher by habitual correspondents, will enable the telegraph to perform much of the present business of the post office. Meanwhile, we have at our disposal, at a moderate cost, an instrument of such miraculous power, that by a single message it has already saved our Indian empire, while day by day and hour by hour it is busy in the promotion of commerce, and the furtherance of private interests of every kind. In my extended tours over all parts of India, I have seldom met a family who had not some anecdote to tell of the services the telegraph had done them. There are few Europeans in India who do not experience a thrill of pleasure when they meet our masts and wires on the margin of every road, and know that these true tokens of science, civilisation, and power traverse our Indian empire to its uttermost limits. Should I see them no more, I can truly say that I shall ever continue to take the most heartfelt interest in the prosperity and improvement of the department, and feel proud and happy that it has been my lot to bring it even to its present imperfect state.

(True extracts) (Signed) W. B. O'SHAUGHNESSY,
Supt. Electric Telegraph in India and Ceylon.

Head Office, 17th May 1860.

RETURN No. 2.

Table showing Monthly Cost of Establishment, of all Persons drawing above Rs. 10 *and House-Rent, Line Guards, School, Workshop, &c.*

Establishment, &c.	Miles of Line.	No. of Offices.	Rupees.	Remarks.
Superintendent in India and Ceylon	..	..	3,000	
Office Establishment, as sanctioned	..	..	625	Includes Auditor, 6 Clerks, and Camp Office.
Bengal	1,700	25	14,495	
Madras	1,038	15	10,533	
East Coast	1,027	12	5,007	
Bombay	1,499	18	8,298	
Central India	1,267	11	6,359	
Indore	708	7	3,258	
Pegu	404	8	3,191	
North-West Provinces, Punjaub, Rohilcund, & Oude	1,500	20	7,621	
Scinde	766	10	4,852	
Dacca	488	3	1,394	
South-East Coast	290	2	1,122	
Ceylon	307	5	..	Paid by the Government of Ceylon.
Coonoor School, monthly cost	..	..	1,035	
Bangalore Workshop	..	..	1,500	
House-Rent, same as 1858-59	..	..	3,679	
Line & Cable Guard, Peons, same as 1858-59	..	..	12,152	
Total	10,397	129	88,121	

(Signed) W. B. O'Shaughnessy,
Supt. Electric Telegraph in India and Ceylon.

Head Office, 17th May 1860.

RETURN No. 3.

(Table referred to in paragraph 29.)

Cash Returns for Private Messages.

1858-59.		1859-60.	
May 1858	Rs. 22,359	May 1859	Rs. 39,143
June	18,997	June	28,885
July	15,495	July	27,548
For the 1st Quarter.	56,851	For the 1st Quarter.	88,376
August	Rs. 17,174	August	Rs. 34,756
September	16,506	September	36,580
October	18,869	October	29,943
For the 2nd Quarter.	52,549	For the 2nd Quarter.	1,01,279
November	Rs. 24,158	November	Rs. 29,430
December	25,685	December	38,461
January 1859	29,892	January 1860	40,078
For the 3rd Quarter.	79,735	For the 3rd Quarter.	1,07,969
February	Rs. 29,563	February	Rs. 42,873
March	31,451	March	40,960
April	32,956	April	41,534
For the 4th Quarter.	93,970	For the 4th Quarter.	1,25,367
For the Year	Rs. 2,83,105	For the Year	Rs. 4,23,991

In 1859-60, the increase being 4,976 per 10,000.

Return of the Total Actual Expenditure in 1859 *and* 1860.

	Total.		
	Rs.	A.	P.
Bengal to Agra	4,64,400	6	7
Bombay	2,08,508	10	0
Madras	2,65,627	0	0
Indore	66,783	0	0
South-East Coast	33,451	0	0
East Coast	1,37,187	0	0
Punjaub, Rohilcund, and Oude	1,66,174	0	0
Central India	1,15,121	0	0
Scinde	1,21,231	1	0
Dacca	4,40,767	0	0
Pegu	51,177	0	0
General Superintendence and Audit	50,000	0	0
Total....Rs.	17,20,427	1	7

Actual expenditure.....Rs. 17,20,427
Estimate..... 16,55,958

Excess .....Rs. 64,469

Arising from construction of new lines from Tuticorin to Paumben, Raneegunge to Midnapore, Shajehanpore to Bareilly, Moradabad to Nynee Tal, and Dehra Gazee Khan to Dehra Ismail Khan in the Punjaub, all ordered since June 1859, and not included in the sketch.

The totals of the returns on which these results have been based have been sent to my office by telegraph, and are open to unimportant corrections. If it be borne in mind that we had not a single professional engineer, surveyor, or architect in the department when the sketch estimate was submitted, and that the Deputy Superintendents at the time were all gentlemen of general education only, I think their approximation to the actual results deserving of favourable notice.

(Signed) W. B. O'Shaughnessy,
Supt. Electric Telegraph in India and Ceylon.

RETURN No. 4.

Return exhibiting the Value of Construction and Working Bills Audited by the Superintendent of Electric Telegraphs in India and Ceylon, from 12th December 1857 to 11th May 1860.

CIRCLES.	PERIOD for which Audited.	CONSTRUCTION.			WORKING.			TOTAL.			REMARKS.
		Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	
1, Bengal	From June 1857 to Oct. 1859	2,78,609	6	3	3,37,818	1	5½	6,16,427	7	8½	1.—The whole expenditure for the introduction of the Morse system is included with the working account.
2, Madras	„ Sept. 1857 to Feb. 1860	3,51,053	10	10	3,72,096	11	6	7,23,150	6	4	2.—The value of stores purchased from the Great Indian Peninsula Railway Company, amounting to Rs. 4,614-14-1, is charged to the Bombay construction account.
3, Bombay, including Guzerat Sub-Division	„ Feb. 1857 to Dec. 1859	2,88,052	9	5	4,02,636	13	6	6,90,689	6	11	3.—Nearly the whole cost of the construction of the granite slates in the Mysore Territory, and the total cost of masonry pillars between Poonamallee and Vellore, are included in this statement.
*4, North-West Provinces, Punjaub, Rohilcund, and Oude	„ April 1857 to Oct. 1859	1,14,065	7	9½	1,11,787	1	7½	2,25,852	9	5	4.—The value of stores received from the Ordnance Department, together with various petty charges incurred by other Departments, have been charged for a period commencing so far back as the year 1854.
5, Scinde and lower Punjaub	„ Sept. 1857 to Feb. 1860	1,19,205	1	10	1,32,389	14	4	2,51,595	0	2	
*6, Indore	„ Sept. 1857 to Mar. 1860	40,160	2	11¼	78,418	9	1	1,18,578	12	0¼	
7, Central India	„ Sept. 1856 to Jan. 1860	2,62,614	2	0½	62,166	6	10½	3,24,780	8	11	
8, East Coast	„ Aug. 1857 to Feb. 1860	3,08,622	1	2	1,14,848	0	7	4,23,470	1	9	
9, Dacca	„ Feb. 1858 to Dec. 1859	36,142	5	6¼	9,291	2	10	45,433	8	4¼	
10, Pegu	„ July 1857 to Jan. 1860	21,314	0	3½	93,901	6	5	1,15,215	6	8½	
11, Ceylon	„ Feb. 1859 to Feb. 1860	7,492	10	7	26,336	7	9	33,829	2	4	
GENERAL CHARGES. *Head Office*, On account of Travelling Expenses and Contingencies	.....	.....			3,178	1	4	3,178	1	4	* Include the expenditure for the reconstruction of the whole of the lines destroyed during the rebellion.
Mr. Wickham, on Special Duty, constructing Cables	.....	6,270	13	8	.....			6,270	13	8	
	Total....Co.'s Rupees	18,33,602	8	4	17,44,868	13	3½	35,78,471	5	7½	No. of Bills audited, 12,554.

Head Office, Audit Branch, Coonoor, 14th May 1860.

(Signed) W. B. O'SHAUGHNESSY,
Superintendent Electric Telegraph in India and Ceylon.

RETURN No. 5.

Return of Cash received for Service Messages in the several Circles of Electric Telegraphs in India, from 1st May 1859 to 30th April 1860.

CIRCLES.	Miles Open.	Offices Open.	1859. May. Service.	June. Service.	July. Service.	August. Service.	September. Service.	October. Service.	November. Service.	December. Service.	1860. January. Service.	February. Service.	March. Service.	April. Service.	TOTAL.	REMARKS.
			Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Bengal and North-West Provinces	1,700	25	2,298 3 0	1,229 1 0	1,367 11 6	2,841 0 0	3,221 8 0	2,211 13 9	2,423 6 11	3,030 0 9	4,262 5 3	5,996 7 6	4,594 14 6	4,386 6 0	38,162 14 2	
Bombay	1,499	18	1,228 15 0	703 14 0	709 1 6	1,275 7 0	1,012 9 0	1,333 0 0	1,501 10 0	1,377 7 0	1,329 10 6	1,888 6 6	1,480 13 6	1,527 15 0	15,867 13 0	
Madras	1,038	15	927 15 0	983 6 0	1,000 1 9	914 13 4	1,278 13 8	1,357 13 10	1,205 1 4	1,938 7 0	2,040 14 5	2,790 5 0	1,627 15 2	1,660 11 0	17,726 5 6	
Punjaub, Rohilcund, and Oude	1,500	20	3,568 11 0	1,383 5 0	1,836 4 0	2,221 3 6	1,525 14 0	1,288 6 6	953 5 0	1,932 4 0	2,099 4 0	2,897 12 0	2,939 4 6	3,391 5 6	26,086 15 0	
East Coast	1,027	12	135 3 0	182 12 0	131 13 3	136 5 0	178 10 0	323 3 0	194 7 0	311 7 6	220 13 0	.....	229 6 0	259 13 6	2,305 7 9	
Central India	1,267	11	278 14 0	179 7 0	288 8 0	239 6 0	316 0 10	476 13 6	251 1 0	273 13 0	380 5 0	344 4 0	246 10 6	175 6 6	3,450 9 4	
Ceylon, South-East Coast	500	7	.....	15 15 0	.....	.....	8 8 6	12 10 6	9 7 6	26 12 6	63 9 6	5 15 0	14 13 0	17 5 0	175 0 6	
Scinde	766	10	464 7 0	898 0 0	812 12 6	900 13 0	679 9 6	807 1 0	563 10 6	397 12 0	373 6 0	487 14 0	725 15 0	621 1 0	7,732 5 0	
Pegu	404	8	1,248 1 0	350 6 0	311 13 6	330 8 0	408 10 0	301 5 0	365 3 6	385 3 0	391 9 6	404 12 6	398 3 0	398 3 0	5,293 14 0	
Indore	708	7	421 5 0	219 12 0	371 14 6	210 1 0	141 11 0	204 14 0	252 15 0	217 1 0	255 8 0	289 15 0	205 4 0	189 15 0	2,980 3 6	
Dacca	488	3	.....	4 0 0	4 0 0	4 0 0	4 0 0	6 4 0	5 2 0	14 1 0	16 6 0	157 9 0	99 10 0	72 14 0	387 14 0	
Total	10,897	136	10,571 10 0	6,449 14 0	6,834 0 6	9,073 8 10	8,775 14 0	8,325 5 1	7,725 5 9	9,954 4 9	11,932 11 2	15,263 4 6	12,562 7 8	12,700 15 6	1,20,169 5 9	

Head Office, 17th May 1860.

(Signed) W. B. O'SHAUGHNESSY,
Superintendent Electric Telegraph in India and Ceylon.

RETURN No. 6.

Return of Cash received for Private Messages in the several Circles of Electric Telegraphs in India, from 1st May 1859 to 30th April 1860.

CIRCLES.	Miles Open.	Offices Open.	1859. May. Private.	June. Private.	July. Private.	August. Private.	September. Private.	October. Private.	November. Private.	December. Private.	1860. January. Private.	February. Private.	March. Private.	April. Private.	TOTAL.	REMARKS.
			Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Bengal and North-West Provinces	1,700	25	6,780 8 0	6,448 9 0	7,200 8 6	8,392 15 0	7,511 2 0	8,208 7 0	8,431 6 0	12,611 3 0	12,940 11 9	13,921 12 6	12,519 1 3	12,218 8 3	1,17,184 12 3	Up to December 1859, opium mistakes were sent to Bombay from Calcutta bearing, and the value appeared in the Bombay accounts. These caused confusion, and led to frauds; and "bearing" messages were refused from the 1st December. This explains the sudden increase of receipts. The Ceylon cash returns show only the amount due to India.
Bombay	1,499	18	13,029 4 0	11,531 9 0	9,420 8 9	13,794 1 0	15,781 6 0	7,094 14 0	7,524 11 0	9,850 13 3	10,405 9 0	10,629 14 0	10,321 2 0	11,363 7 0	1,30,747 3 0	
Madras	1,038	15	4,748 2 0	3,052 14 0	4,377 15 11	4,836 15 9	5,138 6 0	5,497 6 1	4,896 15 0	5,652 7 3	6,467 2 6	8,697 5 7	7,018 4 6	6,680 14 0	67,414 12 7	
Punjaub, Rohilcund, and Oude	1,500	20	2,735 2 0	1,965 2 0	1,500 11 0	1,817 9 6	1,906 13 6	1,951 7 0	2,094 0 3	2,105 3 3	2,608 11 6	2,792 7 0	2,532 14 0	2,496 9 9	26,506 10 9	
East Coast	1,027	12	1,069 11 0	888 12 0	1,150 10 6	1,466 6 10	2,059 11 0	2,009 15 0	1,688 9 0	2,048 15 6	1,899 10 0	.....	2,133 0 6	2,529 2 0	18,944 7 4	
Central India	1,267	11	454 14 0	841 11 0	859 2 6	852 14 6	1,056 5 0	1,148 4 6	1,273 9 6	1,633 4 0	1,620 6 6	1,451 7 6	1,213 0 0	1,176 2 0	13,611 1 0	
Ceylon, South-East Coast	500	7	771 10 0	1,021 9 0	693 15 0	852 9 0	356 7 0	907 7 0	703 4 10	1,104 14 0	1,018 10 0	1,213 6 8	1,006 2 0	1,412 12 0	11,062 10 6	
Scinde	766	10	504 1 0	1,080 0 0	839 1 6	951 13 0	790 4 7	1,022 0 0	894 6 0	984 4 0	865 8 0	1,428 10 0	1,562 2 0	1,236 1 0	12,160 3 7	
Pegu	404	8	1,003 8 0	731 1 0	717 10 1	704 8 0	1,058 1 6	941 12 6	781 3 0	981 10 6	1,168 9 0	1,271 7 6	1,220 0 3	1,220 0 3	11,799 8 7	
Indore	708	7	732 9 0	787 15 0	678 1 0	988 4 0	824 2 6	1,074 8 0	1,050 13 6	1,318 15 6	971 14 0	1,221 12 0	1,210 12 0	1,130 2 0	11,989 12 6	
Dacca	488	3	83 12 0	86 3 0	110 5 0	98 4 0	98 4 0	84 15 0	91 9 6	169 10 0	111 8 0	245 2 0	224 1 0	165 6 6	1,569 0 0	
Total	10,897	136	31,943 1 0	28,886 5 0	27,548 9 9	34,756 4 7	36,580 15 1	29,943 1 1	29,430 7 7	38,461 4 3	40,078 4 9	42,873 4 9	40,960 7 6	41,529 0 9	4,22,990 2 1	

Head Office, 17*th May* 1860.

(Signed) W. B. O'SHAUGHNESSY,
Superintendent Electric Telegraph in India and Ceylon.

To Sir W. B. O'SHAUGHNESSY, F.R.S.,
Bangalore.

SIR,—On the occasion of your departure from India, I am directed by the Committee of the Bombay Chamber of Commerce to express to you the Chamber's high appreciation of the vast benefits that have been conferred on India generally, but more especially on the mercantile community, by the successful establishment of the Electric Telegraph in this country.

The report lately handed to the Chamber by Captain Murray affords the most gratifying evidence of the energy, industry, and unceasing attention to details, without which so great an undertaking could never have been brought to its present state of efficiency; and while disclaiming any wish to detract from the high praise deservedly accorded by you to those who have so ably assisted in the great work, the Chamber cannot take leave of you without expressing their conviction that the rapid and successful extension of the telegraph in India is mainly due to your own personal and unwearied labours.—I remain, Sir, &c.,

(Signed) H. BROOKE,
Secretary.

Bombay Chamber of Commerce, 20th June 1880.

No. 89 OF 1860.

To Captain R. MURRAY,
Depy. Supt. Electric Telegraphs Western India, Bombay.

SIR,—I have the honor to acknowledge receipt of your letter of 9th June, with numerous extracts from the Report of the Superintendent of Electric Telegraphs in India, the greater portion of which has been copied, and will appear in the Annual Report of the Chamber published in September.

These reports are of great interest, and bear testimony to the unwearied labours of the Superintendent and his assistants.

It is with much regret, however, that the Chamber feels it a public duty to comment upon the excessive irregularity and confusion that appears to prevail, more particularly on

that portion of the line between this port and Calcutta: important mercantile messages are at times not delivered at all, or in so absurdly incorrect a form as to be totally unintelligible; while, during the very same period, other messages, of a similar character, and of later date, are delivered promptly, and with scrupulous exactness: The Committee are unable to account for so extraordinary a result, except upon the supposition that some of the signallers at important stations receive bribes to detain, or render unintelligible, the messages of certain persons, while those of others are passed forward with care and promptitude. These irregularities have gradually increased, until they now form a very serious grievance, and the Committee feel that they cannot too earnestly press upon your attention the necessity of adopting some steps to remove them. It occurs to them, that if all messages were numbered in the order of their receipt at the place of despatch, and if a record of these numbers were kept at each repeating station, and the numbers, as received, were duty posted up at the chief office here, it would be possible at once to fix upon the station where any irregularity occurred, and upon the careless or delinquent signaller who was the cause of it.

The paucity of complaints is by no means a reliable test of the efficiency of the department, as sufferers have often other business to attend to, and redress would in many cases come too late to be of any service to them; while the difficulty of obtaining any satisfaction also deters people from making known their grievances. But it is not the less certain, that such irregularities as noted above are of daily occurrence, and, apparently, rapidly on the increase.

The Committee trust that you will give this matter your earnest attention, with the view of raising the character and reliability of the department under your charge. I return herewith the original papers, as requested, and have the honor to be, &c.,

(Signed) H. BROOKE,
Secretary.

Bombay Chamber of Commerce, 17th August 1860.

APPENDIX B.

COTTON CULTIVATION.

CULTIVATION OF AMERICAN COTTON IN THE BOMBAY PRESIDENCY.

No. 1470 OF 1860.

REVENUE DEPARTMENT.

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce.

SIR,—I am directed by the Right Honorable the Governor in Council to forward herewith copy of a letter from the Revenue Commissioner Southern Division, No. 511, dated the 4th April 1860, and of the statement submitted by Mr. Rose, showing the extent of Cotton Cultivation in the Collectorates mentioned in the margin, for the year 1859-60, in contrast with the same for the year 1858-59.—I have the honor to be, &c.,

Poona.
Ahmednuggur.
Sholapore.
Belgaum.
Dharwar.
Sattara.

(Signed) H. L. ANDERSON,
Acting Chief Secretary to Government.

Bombay Castle, 20th April 1860.

No. 511 OF 1860.

REVENUE DEPARTMENT.

From J. N. ROSE, Esq.,
Revenue Commissioner Southern Division,

To B. H. ELLIS, Esq.,
Acting Secretary to Government, Bombay.

Revenue Commissioner's Camp, "Nehr," 4th April 1860.

SIR,—I have the honor to submit, for the information of Government, an abstract statement, showing the extent of Cotton Cultivation in the Collectorates of Poona, Ahmednuggur, Sholapore, Belgaum, Dharwar, and Sattara, for the year 1859-60, in contrast with the same for the year 1858-59.

2. The total area under cotton crop during the year 1859-60 is shown in this statement at acres 906,701 1 g., of which acres 158,304 4 g. were sown with exotic, and acres 748,496 37 g. with indigenous cotton. In the year 1858-59, the entire area planted was acres 799,448 20 g., of which acres 106,964 4 g. represent exotic, and acres 692,484 16 g. indigenous cotton. The result, therefore, is an increase in the total extent cultivated, during 1859-60, over that of 1858-59, of acres 107,352 21 g., of which acres 51,340 represent exotic, and acres 56,012 21 g. indigenous cotton.

3. The exotic cotton was planted chiefly in the Dharwar and Belgaum Collectorates. In Poona, it appears to have been introduced for the first time after many years, but the extent cultivated, viz. 20 goontas, is so small, as hardly to call for notice. In Dharwar, exotic cotton is found in every Talooka, but most extensively in Dummul, Bunkapore, and Raneebednore. The increase in this Collectorate alone is acres 50,920 3½ g. In Belgaum, the cultivation of exotic cotton appears to be gradually extending. In the year under notice, it was planted, though scantily, in parts of the Chickodee, Purusghur, Bagulkote, Hoongoond, Gokak, and Tasgaum Talookas. In Badamee it was more extensively cultivated. The total increase in the extent cultivated this year, in this Collectorate, is acres 419 16½ g.

4. Indigenous cotton is found in all the Collectorates of this Division except Rutnagherry, where its introduction failed many years ago. There has been an increase this year, in the extent cultivated, in the Collectorates of Sholapore, Belgaum, and Dharwar, of acres 5,316 28 g., acres 43,800 31 g., and acres 15,667 21 g., respectively; and a decrease in the Collectorates of Poona, Ahmednuggur, and Sattara, of acres 2,064 15 g., acres 2,044 9 g., and acres 4,743 35 g., respectively. In the Poona Collectorate, it is grown in three only of eight Talookas, the chief producing Talooka being Indapore. In Ahmednuggur, it is cultivated in eleven of sixteen Talookas; Jamkhair, Koretee, and Sheogaum being the most productive. In Sholapore it is found in every Talooka, but most extensively in the southern districts of Moodebehal, Mungolee, Hipurga, and Indee. In Belgaum and Dharwar, also, it is cultivated in every district, being, however, found chiefly in the Hoongoond, Purusghur, Badamee, Bagulkote, Gokak, and Uthnee Talookas of Belgaum, and in the Nowlgoond, Dummul, and Hooblee Talookas of Dharwar; and in Sattara its cultivation is confined to seven of eleven Talookas, the largest extent being found in the districts of Beejapore, Punderpore, and Walwa.—I have the honor to be, &c.,

(Signed) J. N. Rose,
Revenue Commissioner Southern Division.

Abstract Statement, showing the Extent of Exotic and Indigenous Cotton Cultivation in the Collectorates of Poona, Ahmednuggur, Sholapore, Belgaum, Dharwar, and Sattara, during the Years 1859-60 *and* 1858-59, *and the Increase and Decrease in the former Year.*

COLLECTORATES.	EXTENT OF COTTON CULTIVATION.												TOTAL CULTIVATION OF 1859-60.			
	In 1859-60.						In 1858-59.						Exotic Cotton.		Indigenous Cotton.	
	Exotic Cotton.			Indigenous Cotton.			Exotic Cotton.			Indigenous Cotton.						
	Government Land.	Inam Land.	Total.	Government Land.	Inam Land.	Total.	Government Land.	Inam Land.	Total.	Government Land.	Inam Land.	Total.	More than 1858-59.	Less than 1858-59.	More than 1858-59.	Less than 1858-59.
	A. g.	A. g.	A. g.	A. g.	A. g.	A. g.	A. g.	A. g.	A. g.	A. g.	A. g.	A. g.	A. g.	A. g.	A. g.	A. g.
Poona	.. 20	....	.. 20	6,934 38	324 23	7,259 21	....	....	....	8,857 25	466 11	9,323 36	.. 20	....	....	2,064 15
Ahmednuggur	....	....	....	4,455 0	200 5	4,655 5	....	....	....	6,334 13	365 1	6,699 14	....	....	....	2,044 9
Sholapore	....	....	....	130,558 13½	52,390 16½	682,948 30	....	....	....	142,249 26	35,382 16	177,632 2	....	....	5,316 28	....
Belgaum	1,111 30½	865 28	1,977 18½	150,201 15½	638,466 20½	288,668 4	733 27½	824 15	1,558 2	124,667 19	120,119 34	244,787 13	419 16½	....	43,880 31	....
Dharwar, including the Jageer States	95,719 7½	60,606 38	156,326 5½	149,780 23	80,886 28	230,667 11	61,471 8	43,934 24	105,406 2	140,227 21	74,672 9	214,999 30	50,920 3½	....	15,667 21	....
Sattara	....	....	....	26,470 12	7,827 34	34,298 6	....	....	....	31,272 20	7,769 21	39,042 1	....	....	....	4,743 35
Total	96,831 18	61,472 26	158,304 4	468,400 21½	280,096 15½	748,496 37	62,204 35	44,759 9	106,964 4	453,709 4	238,775 12	692,484 16	51,340 0	....	64,865 0	8,852 19
	62,204 35	44,759 9	106,964 4	453,709 4	238,775 12	692,484 16	....	....	....	....	....	....	....	....	8,852 19	....
Net.. Increase	34,626 23	16,713 17	51,340 0	14,691 17½	41,321 3½	56,012 21	....	....	....	....	....	....	51,340 0	....	56,012 21	....
Net.. Decrease	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

(True copies)

(Signed) H. L. Anderson,
Acting Chief Secretary to Government.

(Signed) J. N. Rose,
Revenue Commissioner Southern Division.

IRRIGATION OF COTTON.

No. 4008 OF 1859.

REVENUE DEPARTMENT.

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce.

SIR,—With reference to the correspondence ending with my letter No. 3204, dated the 15th August last, I am directed to forward, for the information of the Chamber of Commerce, a copy of the papers noted in the margin, on the subject of the Irrigation of Cotton-growing Lands.—I have the honor to be, &c.,

Summary of Correspondence. Letter to the Manchester Cotton Supply Association, No. 4007, dated 12th October 1859.

(Signed) B. H. ELLIS,
Acting Secretary to Government.

Bombay Castle, 12th October 1859.

No. 4007 OF 1859.

REVENUE DEPARTMENT.

To G. R. HAYWOOD, Esq.,
Secretary to the Manchester Cotton Supply Association,
London.

SIR,—With reference to my letter No. 3650, dated the 15th ultimo, I am directed to forward to you, for the information of the Manchester Cotton Supply Association, the accompanying copy of a summary of correspondence on the subject of the irrigation of cotton-growing lands.

2. It will be observed, that the result of the experiments which have been tried proves the correctness of the view that irrigation does not benefit the crop of cotton, either in Guzerat or in the Southern Mahratta Country.—I have the honor to be, &c.,

(Signed) B. H. ELLIS,
Acting Secretary to Government.

Bombay Castle, 12th October 1859.

(True copies) (Signed) B. H. ELLIS,
Acting Secretary to Government.

IRRIGATION OF COTTON-GROWING LANDS.

SUMMARY.

With the Government resolution No. 4699, dated 31st October 1857, the two Revenue Commissioners were furnished with copy of a Despatch from the Honorable the late Court of Directors, No. 13, dated 9th September 1857, forwarding copy of one addressed by them to the Government of India, in paragraph 13 of which allusion was made to an opinion expressed by Mr. G. Inverarity, Collector of Broach, in a letter dated 11th June 1855, to the address of the Revenue Commissioner Northern Division, as to the injurious effects of artificial irrigation on the cotton crop.

2. As directed by the Honorable Court, the Revenue Commissioners were instructed to obtain and submit to this Government the judgment of such Collectors as were most conversant with the culture of cotton, on Mr. Inverarity's opinion, and whether that opinion was correct to the extent to which he had laid it down.

3. Mr. Goldfinch, Collector of Sholapore, stated that artificial irrigation was considered altogether unfiecessary, if not injurious, to the cotton plant, and that he had seen some New Orleans cotton, planted in irrigated land as an experiment, that failed completely, though the plant throve well in the same neighbourhood, and on the same description of soil, without irrigation; so that, so far as his experience went, artificial irrigation was injurious.

4. The Collector of Belgaum, Mr. Seton Karr, stated that he did not remember ever to have seen cotton grown under irrigation. He observed, that a good fall of rain was of course necessary for the land in the first instance,—that is, before the seed was put in; but that the time at which the sowing was made, viz. towards the commencement of the cold weather, or when the monsoon was nearly over, was a circumstance which seemed sufficiently to indicate that, after the plant had sprung up, and had attained a few inches of growth, moisture would be injurious.

5. Dr. Gibson, Conservator of Forests, stated that he could not, from experience, speak of the effect of irrigation on country cotton grown in black soil, but that he had seen moderate irrigation applied to the Barbadoes and the upland

cotton grown in such land, with good result. He intimated that he could readily have the matter put to the test of experiment, by raising half a beega in the garden at Dapooree, where the soil is mostly 2nd black, and comparing the produce, as to staple and quality, with that of a similar extent of cultivation at Broach or Dharwar. Dr. Gibson added,—

"In the mean time, I may state my impression, which is this, that regular irrigation may not be found well suited to country cotton; but that, if water be applied, as is done in the case of wheat and some other grains grown in stream-watered land, the effect on the staple would be beneficial.

"This application consists in flooding the fields containing the plant once or twice during its growth, viz.—

"In the event of the latter rains being scanty, such a submersion of the ground would be required once in November, and again in January, while the boll is filling.

"In the event, however, of the rains being abundant in October and November, one watering only would be required, and that late in January.

"It is, I conceive, with this view, that the tanks, described by the traveller Hove (Selections from the Records of the Bombay Government, No. XVI. New Series) as being common in the Broach Districts between 1780 and 1785, must have been kept up.

"That traveller speaks of irrigation as being then the rule; but I conclude that he uses the term in the same sense as that which I have above expressed, as it must be obvious that a single tank of earth-material, as these seem to have been, could not have afforded a supply of water at all adequate to the immense consumption of the element which regular irrigation in a cracky black soil must have caused."

6. The Collector of Ahmednuggur, Mr. Tytler, reported that, although cotton was but little grown in that Collectorate, all that he could hear fully bore out Mr. G. Inverarity's opinion as to the effect of irrigation on cotton crops.

7. Mr. Ogilvy, Collector of Dharwar, stated that he did not find, on inquiry, that irrigation was used for cotton in any part of that Collectorate; and observed that this might be owing to the fact that the plant was invariably grown in black soil, which was rarely irrigated, and was not considered

so suitable for the purpose as other kinds. Mr. Ogilvy intimated that Mr. Channing, late of the Dharwar cotton experiments, having tried irrigation on a small scale, the crop of cotton was increased, both in quantity and quality, and that he had himself seen New Orleans and other kinds of cotton successfully cultivated in a private garden, and in soil which would probably not be selected for the purpose by the Native grower; remarking, that it would thus appear that it had been determined by experiment that cotton could, by judicious management, be irrigated with success, both in black and other soils.

8. Several ryots who had command of water, had, Mr. Ogilvy stated, promised to try the irrigation of New Orleans cotton to a limited extent in different descriptions of soil; and he observed that many Natives in his Collectorate grew, in the small gardens attached to their houses, a few plants each of two descriptions of "deo kuppas," which they watered with the hand; that these plants grew into shrubs of some size, and were said to live for as many as ten years.

9. The question appeared to the Revenue Commissioner Southern Division never to have been fairly and fully tested; and he therefore submitted, that Dr. Gibson be requested to have the matter put to the test of experiment in the gardens at Dapooree, as suggested by him, and that Mr. Ogilvy be instructed to watch carefully, and report the result of, the experiments, which he stated several ryots, who had command of water, had promised to try in the Dharwar Collectorate.

10. Mr. Hadow, Collector of Ahmedabad, forwarded copy of a communication from the Superintendent of Cotton Experiments in his Collectorate, and stated that he inclined to Mr. Daley's views, that irrigation, by occasional floodings at seasonable periods, would be likely to prove beneficial to the crop, both as regarded quantity and quality. Mr. Daley stated,—

"Mr. G. Inverarity's remark relative to the deterioration of the growth and staple of the cotton crop, by means of irrigation, applies to a certain extent to a cold heavy black alluvial soil, which retains water, by its gelatinous property, much longer than any description of soil; but even in this soil, when the pods

are being formed on the cotton plants, the rain-water having either evaporated, or percolated to a depth of from 2 to 4 feet below the surface, I beg respectfully to state, that if the plants were watered at this period, the growth and staple of the cotton crop would in general be improved, instead of deteriorated. These occasional floodings, however, would entail too heavy a water-rate to justify its adoption to the culture of cotton alone on such a soil."

11. Mr. Gray, Acting Collector of Kaira, stated that cotton was cultivated to a very small extent in that Collectorate, and was seldom or never sown by itself, but was always intermixed with the ordinary dry monsoon crops; and that he was enabled to state, from inquiries which he had made, that the cotton produced in his Collectorate was never artificially irrigated; and that if it were so, the young plant (as was supposed by those most experienced and best informed on the subject) would get rotten, and fail to attain to maturity. He observed,—

"It appears that formerly, when Europe cloths were not in general use amongst the Natives of Guzerat, a sort of vegetable wool, called 'nurma,' much superior to the cotton wool, used to be sometimes produced, and that very fine cloths were manufactured therefrom for the higher classes of the Native community. This 'nurma' plant, unlike cotton, was irrigated, and the crops which Dr. Hove describes as having been seen by him at the beginning of page 42 of the printed account of his travels in Guzerat, &c. in 1787-88, (Bombay Government Records, New Series, No. XVI.,) were most probably 'nurma' (and not cotton) plantations; and this supposition is further strengthened by the fact that he describes the colour of the plantations he saw as being yellow, which is the colour of the 'nurma' plant above alluded to. Should this conjecture be deemed to account satisfactorily for the statement of an eminent traveller made about seventy years ago, that at Ahmode, in the Broach Collectorate, 'the cotton plantations were watered from wells,' &c., it would seem unnecessary to make further inquiries as to the probable effect of irrigation on the cotton crop, unless different or contrary opinions be entertained by persons of experience in its culture; in which case, experiments to a small extent in the Broach Collectorate would, I should think, settle the

question more correctly and expeditiously than the conflicting opinions of different officers consulted on the subject."

12. Mr. L. H. B. Tucker, Collector of Broach, observed, that the belief appeared to be universal among Native cultivators, that to irrigate the ordinary indigenous annual, when growing in the deep black soil which forms the great mass of the arable land of these districts, would be injurious rather than beneficial; and that a reference to the very interesting narrative of Dr. Hove's tour in Guzerat in A. D. 1787-88, (Selections from Bombay Records, No. XVI., New Series,) for the purpose of inquiring into the system of cotton cultivation then existing, clearly showed that it was at that time the practice to water some sorts of cotton; but that the inference drawn by Dr. Gibson in paragraph 8 of his preface to the tour, that, as a general rule, two waterings were deemed essential to the proper development of the fruit, and the requisite length of fibre, was hardly, in Mr. Tucker's opinion, borne out by the details given in the work. He added,—

"The cotton to which Dr. Hove's attention was more particularly directed was that species which yielded the long delicate fibre used in the manufacture of the filmy muslins for which India was in those days so famous. The plant which produced it was cultivated as a biennial, if not as a perennial, was generally raised in red or sandy soil, and undoubtedly required great care, and a supply of water, to ensure its yielding wool of the desired fineness. Its cultivation has been long extinct here, as the demand for it ceased when the muslin weavers of India were, as a class, ruined by the manufacturers of England. The more intelligent of the Broach cultivators admit that cotton may have been irrigated in Dr. Hove's days, but maintain stoutly, that the use of water was confined to the fine variety of cotton planted in red soil.

"I have never heard of the irrigation of indigenous cotton in the black soil, though I have seen it growing chance-sown by watercourses, and have been struck by its increased size and luxuriance, and the universal presence of insects in the bolls. It would appear to be irrigated in the Punjaub and in Scinde; but, as explained by Mr. Inverarity, the rich alluvial soil on the banks of the Indus

and its tributaries differs altogether from the black cotton-soil of Guzerat. Wherever, however, irrigation has been had recourse to, with the exotic varieties, it would seem to have been attended with success; and I cannot help thinking, that were it fairly tried with indigenous species, the prejudice against it, which is by no means confined to the Broach District, might prove to be as unfounded as was the belief entertained by the ryots of the Southern Mahratta Country, on the first introduction of the American saw-gins, that their cattle would not eat the seeds of cotton which had been cleaned by the gin."

13. Mr. G. Inverarity, who had in the meantime been appointed Collector of Surat, after referring to the remarks made by him as Collector of Broach, and which led to the present calls, stated that there was further strong *primâ facie* evidence of the fact stated by him, that irrigation was injurious to the cotton crop, in the circumstance that cotton was never found grown upon land subordinate to wells, even where the assessment was light; which would scarcely be the case were the growth in such a position found to be a favourable one. He observed, that he was aware that the facts stated by him were in entire opposition to what was published by Dr. Hove, who indicated very extensive means to have existed in those days for the irrigation of the cotton plant; but that it was very strange that no remains existed of the works which must have been used for such a purpose, and that the system of cotton cultivation adopted at the close of last century should have been so soon lost to the people of Guzerat,—these, too, being of a nation who are slower than any in abandoning customs or prejudices. Mr. Inverarity intimated that he had frequent opportunities of conversing with Mr. Loudon at Broach on the subject, and that he quite agreed with him on the unfitness of cotton for irrigation, and considered that Dr. Hove must have been greatly misled, by his inexperience of the people and the country, before he could have recorded the result of his observations in so erroneous a manner.

14. Mr. Mansfield, Collector of Khandeish, intimated that it was not the practice to use irrigation in the cultivation of cotton in Khandeish, and that there was no tradition among the people of its ever having existed. He observed that, in the western districts of Khandeish, there were a large num-

ber of irrigational works, and that a considerable area of land was under irrigation, in which sugar-cane, rice, wheat, grain, and different kinds of vegetables were grown, but never cotton, notwithstanding its value in the market was much greater than that of any of the above products, excepting sugarcane and rice.

15. The Revenue Commissioner Northern Division stated that the purport of Dr. Hove's account of the cultivation of cotton by irrigation attracted his notice when the book was first published, and as, the following season, his tour comprehended a great portion of the ground that Dr. Hove mentioned, he made frequent inquiries on the subject, and found that the people, almost without exception, ignored the idea of watering cotton, and mostly had never heard of such a thing. The explanation given by Messrs. Gray and Tucker appeared to Mr. Fawcett to be the probable solution of the matter, and he observed that irrigation was probably confined to some particular kind grown in the sandy soil, which commences near Ahmode, and prevailed generally to the northward of that place.

16. The following resolution was passed by Government under date the 19th June 1858, No. 2069 (communicated to the Revenue Commissioners Southern and Northern Disions):—

"It is certain, from the reports now received, that agricultural practice under this Presidency is opposed to the irrigation of cotton crops; and the general belief is, that, with the indigenous variety, at all events, irrigation would be injurious.

"2. It seems probable, nevertheless, that the flooding of the land once or twice during the growth of the crop would improve the produce, both in quantity and quality. Dr. Gibson should be instructed to carry out the experiment suggested by him, at Dapooree, with the view of testing this point; and Government are of opinion that it would be well, for the purpose of comparison, to plant an adjoining half beega also with cotton, and leave it unirrigated. The produce grown upon these two half beegas would be a fairer test of the effect of irrigation than the comparison between the produce of the irrigated half beega at Dapooee, with that of the unirrigated black soil of Broach and Dharwar. The Collectors of Surat and Broach should

also be requested to make the same experiment during the ensuing season. (See paras. 17 and 20 of this summary.)

"3. If not very inconvenient, the experiment should be tried on different soils (both red and black) in each of the cotton-growing Collectorates,—a beega of each divided, as proposed above, into half beegas; Government paying ryots, whenever necessary, the cost of the experiment, or such compensation as may be deemed just.

"4. The Collectors and Dr. Gibson to be requested to give the experiment now ordered a very careful trial. In the mean time, the accompanying summary of the replies given by the officers to whom the subject was referred may be forwarded to the Government of India, in reply to their letter No. 1753, of the 31st October last, and to the Honorable Court, with reference to its Despatch No. 9 of 1857." (The necessary communications were made to the Government of India and Honorable Court.)

17. In a letter addressed to the Revenue Commissioner Northern Division, under date 28th June 1859, No. 368, the Collector of Broach, Mr. L. H. B. Tucker, thus reported the result of an experiment made by him:—

"2. An acre of black soil was selected at Broach, and one of red soil at Jumboosur, and great care was taken to carry out the experiment completely. One half of each acre was left unirrigated; the other halves received each two copious waterings—the first in December, the rain having fallen late and plentifully, the second while the bolls were filling.

"3. The return was as follows:—

"BROACH BLACK SOIL."

Irrigated.		*Unirrigated.*	
Clean cotton	41½ seers.	Clean cotton	34½ seers.
Seed	86¾ „	Seed	72¼ „
Total	128¼ „	Total	106¾ „

"Giving an increase for irrigation of,—

Clean cotton	7 seers.
Seed	14½ „
Total	21 „

"JUMBOOSUR LIGHT SOIL.

Irrigated.		*Unirrigated.*	
Clean cotton	63 seers.	Clean cotton	57 seers.
Seed	134 „	Seed	134 „
Total	197 „	Total	191 „

"Giving an increase for irrigation of clean cotton 6 seers. Unless, therefore, there should be a marked improvement in the staple of the irrigated cotton, to ascertain which I have sent you by banghy samples of each sort, the experiment must, I fear, be considered a failure."

18. In submitting to Government the Collector's letter, the Revenue Commissioner Northern Division suggested that the samples sent by Mr. Tucker be submitted to test by the Chamber of Commerce of Bombay, who were to be requested to report results.

19. Copy of the letter from the Collector of Broach (Government letter No. 2760, dated 15th July 1859) was forwarded to the Chamber of Commerce, who were requested to favour Government with their opinion on the samples of cotton therein referred to, which were also transmitted to them.

20. Mr. A. D. Robertson, Acting Collector of Surat, stated in a letter addressed by him to the Revenue Commissioner Northern Division, under date the 18th July 1859, No. 591, that his predecessor, Mr. Inverarity, had caused experiments to be made in both the black and gorat soil, and Mr. Robertson detailed the result in the following terms:—

"BHEESTAN VILLAGE.—*Black Soil.*

"In this village, the yield of cotton from irrigated land in half a beega was 1 maund and 37¾ seers, and that of unirrigated cotton in the same extent of land was 2 maunds and 9¼ seers.

"Though the quantity produced from irrigated land is less than that produced from unirrigated land, the former is better in quality, it being stronger and firmer in fibre than the latter, which is comparatively weak.

"The reason assigned for less being produced in irrigated land is that irrigation is not congenial to cotton plants in black soil.

"ULTHAN VILLAGE.—*Gorat Soil.*

"The yield of cotton from irrigated land in half a beega was 2¼ maunds, and that of unirrigated cotton in the same extent of land was 1¼ maund.

"Here the cotton produced from unirrigated land, though less in quantity, is better in quality, than that produced by irrigation. It is supposed that in gorat soil, by irrigation, the yield is heavier than it is where irrigation is not had recourse to, but the cotton produced is not good in quality."

Mr. Robertson forwarded to the Revenue Commissioner Northern Division a small quantity of cotton produced in the irrigated and unirrigated lands in both the villages.

21. In submitting to Government Mr. Robertson's letter, the Revenue Commissioner Northern Division stated, in his memorandum No. 1388, dated the 27th July 1859, that the Chamber of Commerce would, it was presumed, be referred to as to the quality of the samples submitted by Mr. Robertson, and that the Collecter would be requested to retain the cotton produced from the experiments till the receipt of instructions from Government as to its disposal.

22. A copy of the memorandum from the Revenue Commissioner Northern Division, and its accompaniment from Mr. Robertson, was, on the 4th August 1859, forwarded to the Chamber of Commerce, (Government letter No. 3058, dated 4th August 1859,) who were requested to favour Government with their opinion on the samples of Surat cotton sent by Mr. Robertson.

23. In reply to the references made to the Chamber of Commerce in the Government letters dated the 15th July and 4th August 1859, they stated, in their Secretary's letter No. 93, of 8th September 1859,—

"The quality of the cotton does not appear to be materially affected; but, if anything, that from the irrigated black soil appears rather weaker than the unirrigated, and the reverse to be the case with that grown in light soil. As, therefore, the expense must be considerable, and the increased outturn unimportant, the Committee are of opinion that the question of irrigation in the districts alluded to (Surat and Broach) may be regarded as satisfactorily disposed of.

"It may be stated, as a general principle, that when once the plant has attained its full growth, and has come into bloom, the less water it receives the better, as the effect of watering at such a period is usually to cause the bolls to drop off, and the plant has again to put forth new fruit-bearing branches: the effect, therefore, is to delay, without materially affecting, the ultimate outturn of the crop."

24. Copy of the above letter was forwarded to the Revenue Commissioner Northern Division, (Government letter No. 3649, dated 15th September 1859,) and the Manchester Cotton Supply Association were furnished with copy of the correspondence on this subject for their information. (Government letter No. 3650, dated 15th September 1859.)

25. In the Belgaum Collectorate, the Collector reports that the experiment was confided to his First Assistant, who reports the result to be that—

"Cotton cannot be grown profitably in these districts on red soil, and that in black soil irrigation is positively injurious to the crop."

26. Mr. Seton Karr states:—

"The actual result of his experiment in figures is as follows:—

"*Half Beega—Red Soil.*

	Yield.	Value.	Expense of Cultivating.
		Rs. as. p.	Rs. a. p.
Irrigated	1 Maund 44 Seers ..	1 4 5	10 5 6
Unirrigated.....	.....	....	10 0 0

"*Half Beega—Black Soil.*

	Yield.	Value.	Expense of Cultivating.
		Rs. a. p.	Rs. a. p.
Irrigated	6 Maunds 5 Seers.	10 12 6	5 15 0
Unirrigated.....	10 „ 4 „		

27. In submitting the Collector's letter to Government, the Revenue Commissioner Southern Division observes, (memorandum No. 1771, dated 30th August 1859,)—

"2. As regards the Belgaum Collectorate, the result is stated to be a failure with respect both to red and black soils. The samples of cotton produced will be sent when received." (Since submitted, and sent to the Chamber of Commerce.)

28. Paragraphs 1 and 2 of the Collector's letter, and paragraph 2 of Revenue Commissioner's endorsement, were forwarded to the Chamber of Commerce, with the Government letter No. 3651, dated 15th September 1859.

29. In paragraph 13 of his Garden and Forest Reports for 1858-59, Dr. Gibson stated, —

"13. Cotton, watered and unwatered, was tried as an experiment, in obedience to the orders of Government, last season.

"The produce as is usual with cotton grown in this part of the country,—short in staple, and all the pods more or less diseased. Difference in produce between watered and unwatered not more than 4lb. The total quantity sown was three-quarters of an acre, and this in soil which, if situated in Guzerat, would have been called cotton 'khanum' soil, of quality No. 2."

30. Copy of this paragraph was furnished to the Chamber of Commerce, with the Government letter No. 3204, dated 15th August 1859.

31. No report has yet been received from the Collector of Dharwar.

No. 4304 OF 1859.

REVENUE DEPARTMENT.

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce.

SIR,—In continuation of my letter No. 4008, dated the 12th instant, I am directed to forward, for the information of the Chamber of Commerce, copy of a memorandum from

the Revenue Commissioner Southern Division, No. 2138, dated the 19th instant, and of its accompaniments, from the Collector of Dharwar, reporting the result of experiments in the irrigation of cotton in the districts of that Collectorate.—I have the honor to be, &c.

(Signed) B. H. ELLIS,
Acting Secretary to Government.

Bombay Castle, 31st October 1859.

Memorandum from the Revenue Commissioner Southern Division.

No. 2138 OF 1859.

REVENUE DEPARTMENT.

Poona, Revenue Commissioner's Office, 19th October 1859.

Submitted for the information of Government, with reference to the 1st paragraph of the endorsement from this office, No. 1771, dated 30th August last.

2. The result of the experiments has been unfavourable in this Collectorate also, both in black and red soil.

(Signed) E. G. FAWCETT,
Revenue Commissioner Southern Division.

No. 1239 OF 1859.

From T. OGILVY, Esq.,
Collector of Dharwar,

To the REVENUE COMMISSIONER SOUTHERN DIVISION,
Poona.

Dharwar, Collector's Office, 14th October 1859.

SIR,—With reference to your endorsement dated the 22nd June 1858, No. 1617, I have the honor to transmit to you a statement, showing the results of experiments tried in the

past season of irrigating cotton, and of planting irrigated and unirrigated cotton together.

2. The result has not been favourable either in black or red soil. The best crop was obtained from 24 chains of irrigated black soil at Haveree, in the Bunkapore Talooka, which are reported to have yielded 360lb. of good New Orleans cotton.

3. As a general rule, there are no facilities for irrigation in the black cotton plains, and, considering the success with which cotton is cultivated in this Collectorate without irrigation, it would not appear to be expedient to urge the cultivators to have recourse to it.—I have the honor to be, &c.,

(Signed) T. OGILVY,
Collector.

STATEMENT

SHOWING THE

SULTS OF EXPERIMENTS AT DHARWAR IN COTTON CULTIVATION BY IRRIGATION, AND OF PLANTING IRRIGATED AND UNIRRIGATED COTTON TOGETHER.

Statement, showing the Results of Experiments tried in the past Season, at Dharwar,

TALOOKAS.	VILLAGES.	CULTIVATED IN BLACK SOIL.							
		Irrigated.				Not Irrigated.			
		Acres.	Assessment.	Expense of Cultivation.	Profit.	Acres.	Assessment.	Expense of Cultivation.	Profit.
1	2	3	4	5	6	7	8	9	10
		A. ch.	Rs. a. p.	Rs. a. p.	Rs. a. p.	A. ch.	Rs. a. p.	Rs. a. p.	Rs. a. p.
HOOBLEE.	Yellapoor	0 10	0 4 0	1 0 0	....	0 10	0 4 0	0 8 0	0 1 6
BUNKAPORE.	Kurudgee	0 20	3 8 0	1 4 0	0 3 1	4 0	4 3 6	10 0 0	....
	Hutteemuttoor	0 6	0 12 0	Not known.		0 11	0 5 11	Not known.	
	Haveree	0 28	5 4 0	10 8 0	7 8 0	0 30	5 4 0	10 8 0	....

of Irrigating Cotton, and of Planting Irrigated and Unirrigated Cotton together.

CULTIVATED IN RED SOIL.								REMARKS.
IRRIGATED.				NOT IRRIGATED.				
Acres.	Assessment.	Expense of Cultivation.	Profit.	Acres.	Assessment.	Expense of Cultivation.	Profit.	
11	12	13	14	15	16	17	18	19
A. ch.	Rs. a. p.	Rs. a. p.	Rs. a. p.	A. ch.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
....	....	....	....	....	....	....	....	Irrigated from a well once a month, for four months; the crop totally failed. The soil that was not irrigated produced a minimum of the crop, owing to insufficiency of rain.
....	....	....	....	....	....	....	....	Was irrigated weekly, from a tank. The pods came up well, but the greater portion of them were eaten up by foxes, and the rest had dropped off. The non-irrigated crop did not come up well, owing to want of rain.
....	....	....	....	....	....	....	....	Was irrigated three times. The crop did not yield anything, owing to too much damp; the yield of cotton was half a pound. The non-irrigated crop yielded six pounds of cotton.
....	....	....	....	....	....	....	....	Of the 28 chains of garden land cultivated, 24 chains were free from trees. The crop in this was watered from a tank thrice, —once after sowing, once after the plants came into flower, and once after they were in pod. The yield of cotton was 360 lb. The remainder (4 chains of the land) was thick with garden trees, and the crop sown in it totally failed,

TALOOKAS.	VILLAGES.	CULTIVATED IN BLACK SOIL.							
		IRRIGATED.				NOT IRRIGATED.			
		Acres.	Assessment.	Expense of Cultivation.	Profit.	Acres.	Assessment.	Expense of Cultivation.	Profit.
1	2	3	4	5	6	7	8	9	10
		A. ch.	Rs. a. p.	Rs. a. p.	Rs. a. p.	A. ch.	Rs. a. p.	Rs. a. p.	Rs. a. p.
BUNKAPORE.	YELWUGEE	....	....	....	....	....	....	....	....
DUMBUL.	GUDUG	0 17	0 10 2	5 0 0	....	....	....	....	....
	MULSAMOODRA	0 18	0 4 8	6 0 0	....	....	....	....	....

CULTIVATED IN RED SOIL.								
IRRIGATED.				NOT IRRIGATED.				REMARKS.
Acres.	Assessment.	Expense of Cultivation.	Profit.	Acres.	Assessment.	Expense of Cultivation.	Profit.	
11	12	13	14	15	16	17	18	19
A. ch.	Rs. a. p.	Rs. a. p.	Rs. a. p.	A. ch.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
								through too much damp. Of the 30 chains of non-irrigated crop, 25 chains produced 144lb., and the remainder, 5 chains, produced only 2½lb.
0 6	0 6 0	2 0 0	....	0 6	0 6 0	2 0 0	....	Was irrigated six times, from a tank. The pods came up in excellent condition, but, owing to the heavy mango showers which fell soon after, they got spoiled. The non-irrigated crop promised well, but was destroyed by grubs.
....	....	....	....	....	....	....	....	Irrigated from a well once a week. The crop of a medium quality, owing to its having been produced in Bagayet land, which is not favourable to its growth. Profit nil.
0 10	1 1 0	3 0 0	....	....	....	....	....	The crop grown in black soil was irrigated from a well fortnightly, during February and March, and is of medium quality, owing to Bagayet land not being favourable to its growth. The red soil crop was watered from a well once, in the month of March; of medium quality, owing to its being grown in Bagayet land. Profit nil.

TALOOKAS.	VILLAGES.	CULTIVATED IN BLACK SOIL.							
		IRRIGATED.				NOT IRRIGATED.			
		Acres.	Assessment.	Expense of Cultivation.	Profit.	Acres.	Assessment.	Expense of Cultivation.	Profit.
1	2	3	4	5	6	7	8	9	10
		A. ch.	Rs. a. p.	Rs. a. p.	Rs. a. p.	A. ch.	Rs. a. p.	Rs. a. p.	Rs. a. p.
DUMBUL.	HOOLKOTEE	....	....	....	....	....	....	....	....
	KOORTKOTEE	1 39	1 12 0	9 8 0	....	....	....	....	....
	NURRAGUEL	....	....	....	....	....	....	....	....
RANEE-BEDNORE.	RANEEBEDNORE	....	....	....	....	....	....	....	....

CULTIVATED IN RED SOIL.								
IRRIGATED.				NOT IRRIGATED.				REMARKS.
Acres.	Assessment.	Expense of Cultivation.	Profit.	Acres.	Assessment.	Expense of Cultivation.	Profit.	
11	12	13	14	15	16	17	18	19
A. ch.	Rs. a. p.	Rs. a. p.	Rs. a. p.	A. ch.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
0 8	0 13 7	1 8 0	....	....	....	....	....	Irrigated from a tank once during each of the months of January and February. Crop of medium quality, owing to its having been produced in Bagayet land, which is not favourable to its growth. Profit nil.
....	....	....	....	....	....	....	....	Irrigated from a well during the months of January and March. Crop of medium quality, owing to Bagayet land being unfavourable to its growth. Profit nil.
1 30	6 6 5	34 8 0	....	....	....	....	....	Irrigated once a week, from a well, during the months of September 1858 to March 1859. Crop failed. The nature of Bagayet land, in which there is much shade and brush-wood, is unfavourable to its growth. Profit nil.
25 10	76 8 0	....	....	....	....	....	....	This crop was planted under a tank. As there was no water in it, the crop withered away. Profit nil.

TALOOKAS.	VILLAGES.	CULTIVATED IN BLACK SOIL.							
		IRRIGATED.				NOT IRRIGATED.			
		Acres.	Assessment.	Expense of Cultivation.	Profit.	Acres.	Assessment.	Expense of Cultivation.	Profit.
1	2	3	4	5	6	7	8	9	10
		A. ch.	Rs. a. p.	Rs. a. p.	Rs. a. p.	A. ch.	Rs. a. p.	Rs. a. p.	Rs. a. p.
RANEEBEDNORE.	RANEEBEDNORE	....	....	....	....	....	....	....	....
	HONETEE	0 27	7 12 0	9 4 0	0 14 0	....	....	....	....

Dharwar, Collector's Office, 14th October 1859.

CULTIVATED IN RED SOIL.

IRRIGATED.				NOT IRRIGATED.				REMARKS.
Acres.	Assessment.	Expense of Cultivation.	Profit.	Acres.	Assessment.	Expense of Cultivation.	Profit.	
11	12	13	14	15	16	17	18	19
A. ch.	Rs. a. p.	Rs. a. p.	Rs. a. p.	A. ch.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
10 27	32. 4 0	....	....	....	....	....	....	Watered from a tank on two or three occasions. The crop did not flourish, owing to its having been produced in red soil. Profit nil.
....	....	....	....	....	....	....	....	Irrigated from a tank once in three months.

(Signed) T. OGILVY,
Collector.

(True copies)

(Signed) B. H. ELLIS,
Acting Secretary to Government.

No. 164 OF 1860.

REVENUE DEPARTMENT.

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce.

SIR,—With reference to your letter marginally quoted, I am directed to state, for the information of the Chamber of Commerce, that the First Assistant Collector of Belgaum, in charge, has reported that;—

No. 112, dated the 13th October 1859, regarding the cultivation of cotton, irrigated and unirrigated, in the Belgaum Collectorate.

"The cotton seed sown in red soil came up, and that the plants thrived as long as the rain lasted, but withered as soon as it ceased. The roots were found to have penetrated but a short distance below the surface of the soil. The red soil is too hard and impenetrable for cotton; it dries up quickly, and cakes after the rains."

Mr. D'Oyly observes, that cotton is not sown in red soil in the Belgaum Collectorate, and presumes that red soil there and elsewhere is unsuited to cotton. In this, however, he is in error; for red soils are of various qualities, and in Dharwar some of the experiments in unirrigated red soil were very successful.—I have the honor to be, &c.,

(Signed) B. H. ELLIS,
Acting Secretary to Government.

Bombay Castle, 12th January 1860.

FAILURE OF AMERICAN SEED.

No. 4437 OF 1859.

REVENUE DEPARTMENT.

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce.

SIR,—With reference to paragraph 18 of the letter from the Superintendent Cotton Gin Factory, Dharwar, noted in the margin, I am directed to state that it appears, from a further report from Dr. Forbes (dated the 14th ultimo), that the experiment tried

No. 106, dated the 16th September 1859, of which a copy was sent to the Chamber of Commerce with Government letter No. 4229, dated the 24th October 1859.

in that Collectorate with the New Orleans cotton seed supplied by the Chamber of Commerce has proved a failure, owing to the seed having lost its germinating quality.

2. Dr. Forbes has been informed that the ryots should not be called on for payment, and that any money that may have been paid by them should be refunded. The seed must have been old, or damaged on the voyage; and His Lordship in Council hopes that greater care will be taken in future in the selection of seed, as it must be most discouraging to a ryot to take seed from Government which involves a direct loss of his labour, and, besides, prevents him from turning his land to a profitable account.—I have the honor to be, &c.,

(Signed) B. H. Ellis,
Acting Secretary to Government.

Bombay Castle, 9th November 1859.

No. 87 of 1860.

Revenue Department.

From the Commissioner in Scinde,
To the Chairman Bombay Chamber of Commerce,
Bombay.

Dated the 7th January 1860.

Sir,—Referring to your letter of the 10th May 1859, to Sir Bartle Frere, late Commissioner in Scinde, and that officer's reply, No. 1077, dated 17th idem, I have the honor to forward copies of a report and enclosures from the Collector of Hydrabad, giving the result of the experiment with the five bags of American cotton seed which you forwarded.

2. I likewise annex a copy of my reply to the Collector, and will address you again on receipt of Lieutenant Tyrwhitt's further report.

3. I shall also inform you at a future time of the result of the larger supply of cotton seed referred to in your subsequent letter of the 20th May.—I have the honor to be, &c.,

(Signed) J. D. Inverarity,
Commissioner in Scinde.

Commissioner's Office, Camp Jerruck, 7th January 1860.

(Copy.) No. 1958 OF 1859.

REVENUE DEPARTMENT.

From the COLLECTOR OF HYDRABAD,
To the COMMISSIONER IN SCINDE.

Dated 5th December 1859.

SIR,—With reference to the correspondence as per margin, I have the honor to submit the accompanying reports from Captain Cowpar and Lieutenant Tyrwhitt on the experiment they were directed to try relative to the cultivation of American cotton in their districts.

Letter No. 1078, dated the 17th May, forwarding, for distribution and experiment, a quantity of American cotton seed, and requesting a report on the result of the experiment.

2. I have directed Lieutenant Tyrwhitt to furnish a detailed report on the quantity of seed sown in the three beegas which he says are in a flourishing state, the total cost incurred in cultivation, including the assessment on the land, the quantity and quality of the outturn, and the price it would fetch in the bazar.—I have the honor to be, &c.,

(Signed) W. R. LAMBERT,
Collector.

Collector's Office, Camp Baga-ka-Tanda, 5th December 1859.

(Copy.) No. 251 OF 1859.

REVENUE DEPARTMENT.

From the DEPUTY COLLECTOR OF NOWSHERA,
To the COLLECTOR OF HYDRABAD.

Dated 16th September 1859.

SIR,—With reference to the correspondence as per margin, I have the honor to report that the American cotton experiments in this district have failed, owing to the seed having been damaged.

Commissioner's No. 1078, dated 17th May 1859, received under Collector's endorsement No. 868, of 21st instant, requesting to report, in detail, proceedings relative to the cultivation of the American cotton seed.

2. It was sown in several fields near Tarooshah, between the 26th and 30th June, under my personal

superintendence, and had every possible attention; but only a seed here and there germinated, and the few plants which came up looked sickly. As it would have been inconvenient to water the plants where they sprung up, they were carefully transplanted into a corner of one field; but neither those transplanted, nor the plants that had been allowed to grow where they sprung up, ever assumed a healthy, luxuriant appearance. About the beginning of this month, they put forth a few blossoms, but were about the same time attacked at the roots by an insect, and gradually withered away.

3. I am not prepared to say what was to blame for the failure of the plants that sprung up. The Natives think the climate is unsuitable; but I lean to the supposition, that if good sound seed were sown in February or the beginning of March, it might very probably succeed.—I have the honor to be, &c.,

(Signed) R. COWPAR, Captain,
Deputy Collector.

Deputy Collector's Office, Tarooshah, 16th September 1859.

(True copy) (Signed) W. R. LAMBERT,
Collector.

(Copy.) No. 525 OF 1859.

From the DEPUTY COLLECTOR OF MEERPOOR AND THURR AND PARKUR,

To the COLLECTOR OF HYDRABAD.

Dated Nuggur, 18th November 1859.

SIR,—With reference to correspondence as per margin, I have the honor to report on certain experiments directed by me to be tried in different localities last season in the Talookas Allyar, Narra, Meerpoor, and Gorechanee, as follows:—

Commissioner's letter No. 1078, of 17th May 1859.
Collector's endorsement No. 868, of 21st May 1859.
Requesting to report on the growth of cotton seeds in the Meerpoor Districts.

1. In the Meerpoor Talooka, 8 beegas were planted, or rather sown, about the 5th of June, and 2 beegas about the 2nd of August. Of those sown in June, in the usual Native way of drills, and watered by

canals, 3 beegas are in a flourishing state, but 5 beegas have dried up before blossoming; and that sown in August has not grown at all.

2. In the Allyar, Narra, and Gorechanee Talookas, the experiments were tried in the early part of August; but all met with total failure.

3. The plants from early sown seed in the Meerpoor Talooka have attained an average height of 4 feet, but their produce has not been yet picked.

4. The result thus indicated is so different from that which I had reason to expect, that I must reserve my opinion as to its merits until I have the particulars of weight of cotton picked, and see the cotton itself, which has been produced in the Meerpoor Talooka; but want of care and trouble has been, I am convinced, the cause of the failure,—the cultivators just putting the seed in the ground because they had received it from Government, and in no way taking any pains for its success, but looking after their bajree, &c., upon the produce of which their livelihood depended.

5. I am still disposed to believe, that notwithstanding this very unfavourable report, early planting in Scinde in June, and end of December, done with care, will, by steady perseverance, lead to the desired result; and I would here remark, that when seeds are sown in August, which is the month for heavy rains, the seed rots in the ground, but where sown in churka lands in June, and on flooded lands at the latter end of December, the result will always be favourable.

6. The barrel of cotton seed mentioned in correspondence as per margin only reached me in September, so that I shall be unable to sow it as an "adawak" crop on flooded lands.

No. 1214, of 14th August 1859. Intimates that a barrel of cotton seed is sent for experiment.

7. I would here take the opportunity of stating, that it is my wish to try experiments in growing cotton on a sufficiently large scale to really fairly test the success or otherwise of growing New Orleans cotton in these parts, bearing all the expense and risk of success, provided that I be not called upon to pay any assessment during the experiment.

8. My reasons for wishing to do so being, that getting only a small quantity of seed late in the season, and distributing it to the cultivators, is in no way satisfactory, nor can any correct opinion be arrived at; for it does not get the

labour and trouble bestowed upon it that is necessary for success.

9. I do not wish in any way to make the experiment remunerative, or wish to make the experiment for myself, but for the sake of the districts.

10. As you are aware, the growing of the common Scindee cotton, requiring little or no care, has greatly increased in my districts. It is my desire to see a far better quality introduced, and it is only by clearly proving and showing how such can be done, that the result wished for can be obtained. There is plenty of waste land available for my experiments, which I trust I may be permitted to make.—I have the honor to be, &c.,

(Signed) G. TYRWHITT,
Deputy Collector.

(True copy) (Signed) W. R. LAMBERT, Collector.

(True copies) (Signed) M. J. SHAW STEWART,
Assistant Commissioner in Scinde.

Report from the Mooktyarkar of Tanda Allyar, No. 3181, *of* 18*th October* 1859.

The cotton seed you had sent me was distributed to the cultivators in the months of June and August last. Every effort was made for its growth, but failure was its result.

MOOKTYARKAR OF NARRA.—FAILURE.

Report from the Kardar of Meerpoor, No. 1304, *of* 23*rd October* 1859.

I received on 5th June last about 2 maunds and 20 seers of cotton seeds, and in August last 12½ seers. The seeds were given to the cultivators to be sown in different localities. The result of the experiment is as follows:—

The seeds were sown in June last. About 3 beegas have attained a height of 3 feet, and the rest have all withered

away before they attained half their size. The seeds sown in August have not grown at all.

(True translation)

(Signed) G. TYRWHITT,
Deputy Collector.

(True copy) (Signed) M. J. SHAW STEWART,
Assistant Commissioner.

No. 14 OF 1860.

REVENUE DEPARTMENT.

From the COMMISSIONER IN SCINDE,
To the COLLECTOR OF HYDRABAD.

Dated 3rd January 1860.

SIR,—In acknowledging your letter No. 1958, dated 5th December 1859, I have the honor to state, that the further report from Lieutenant Tyrwhitt is awaited.

2. With reference to Lieutenant Tyrwhitt's 7th paragraph, I would observe that a Deputy Collector should not engage in cultivating agricultural produce on his own account. Government cotton farms elsewhere have not proved remunerative, but private enterprise has succeeded where Government attempts have failed; and hence, I would recommend that, when a supply of New Orleans cotton seed is obtained, it be distributed gratis to those cultivators who are interested in raising produce for exportation, and who are likely, from their skill, and knowledge of the profits to be obtained, to apply themselves to give the crop every attention.—I have honor to be, &c.,

(Signed) J. D. INVERARITY,
Commissioner in Scinde.

Commissioner's Office, Camp Joongshee, 3rd January 1860.

(True copy) (Signed) M. J. SHAW STEWART,
Assistant Commissioner in Scinde.

No. 330 OF 1860.

REVENUE DEPARTMENT.

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce.

SIR,—With reference to your letter dated the 13th October last, No. 111, I am directed by the Right Honorable the Governor in Council to forward, for the information of the Chamber, a copy of the documents noted in the margin.—I have the honor to be, &c.,

Letter from the Acting Collector of Dharwar, No. 18, dated the 7th January 1860, with accompaniment.

(Signed) B. H. ELLIS,
Acting Secretary to Government.

Bombay Castle, 25th January 1860.

No. 18 OF 1860.

From W. A. GOLDFINCH, Esq.,
Acting Collector, Dharwar,

To E. G. FAWCETT, Esq.,
Revenue Commissioner Southern Division.

Dharwar, Collector's Office, 7th January 1860.

SIR,—As requested in your endorsement No. 2168, of the 22nd October last, I have the honor to append a statement, showing the details of the experiment of cultivating the Egyptian cotton in the Dumbul Talooka, in 1858-59.

2. The District Officer's report, on which the assertion made in Mr. Gordon's letter No. 1027, of the 13th August last, that "the sowing took place in May," was founded, has, on subsequent inquiry, proved to be incorrect. The actual dates of sowing were in August and October.—I have the honor to be, &c,

(Signed) W. A. GOLDFINCH,
Acting Collector.

Statement showing the Details of the Experiment of Cultivating Egyptian Cotton in the Dumbul Talooka, Dharwar Collectorate, during the Year 1858-59.

District.	Acres Cultivated.	Dates of Sowing.	Width of Drill.	Dates of Ripening of Crops.	Remarks.
1	2	3	4	5	6
Dumbul	A. ch. 51 32	28th August and 15th Oct. 1858.	1½ foot	From 5th March to 17th April 1859.	Scanty crop, attributable to scanty rain, and attacks of insects.

(Signed) W. A. Goldfinch,
Acting Collector.

Dharwar, Collector's Office, 7th January 1860.

(True copies)
(Signed) B. H. Ellis,
Acting Secretary to Government.

No. 725 OF 1860.

REVENUE DEPARTMENT.

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce.

SIR,—With reference to my letter No. 4437, dated the 9th November last, I am directed to forward, for the information of the Chamber of Commerce, copy of a memorandum from the Revenue Commissioner Northern Division, No. 374, dated the 7th instant, and of its accompaniment, reporting the result of the experiment tried at Ahmedabad with the American cotton seed supplied by the Chamber.

2. Judging from the reports from other districts, there is little doubt but that the seed was spoiled before it reached Ahmedabad, as Mr. Mansfield supposes. Seed for future experiments should, His Lordship in Council is of opinion, be packed in barrels, and not in bags.

3. A copy of the papers will also be sent to the Cotton Supply Association at Manchester.—I have the honor to be, &c.,

(Signed) B. H. ELLIS,
Acting Secretary to Government.

Bombay Castle, 23rd February 1860.

Memorandum by the Revenue Commissioner Northern Division.

No. 374 OF 1860.

REVENUE DEPARTMENT.

Kaira Districts, Revenue Commissioner's Office, Camp Mahtur, 7th February 1860.

The following Report by the Acting Second Assistant Collector of Ahmedabad, in charge, No. 214, dated 1st February 1860, is submitted for the information of Government, with reference to Mr. Acting Secretary Ellis' memorandum No. 1933, dated 20th May 1859.

2. The Revenue Commissioner in inclined to the opinion that the seed, packed, as it was, in bags, was deteriorated on its way out to India, and could not, therefore, germinate. Mr. Daley, also, was of this opinion; the experiments made.

by him having, as Mr. Mansfield understood when at Dhundooka, proved a failure likewise.

(Signed) S. MANSFIELD,
Revenue Commissioner Northern Division.

Report by the Acting Second Assistant Collector in Charge, Ahmedabad.

No. 214 OF 1860.

Ahmedabad, Collector's Office, 1st February 1860.

The Acting Second Assistant Collector in charge has the honor, with reference to the endorsement No. 1931, dated 20th May 1859, from the Acting Secretary to Government, (submitted through the Revenue Commissioner Northern Division,) to state, that the experiments therein ordered were conducted independent of Mr. Daley, but the result has proved to be most unsatisfactory, as will be seen from the reports of the Assistant Collectors quoted below.

Mr. Weeding, First Assistant Collector, wrote, under date the 12th January 1860, as follows :—

"I have the honor to report the result of the experiments in sowing New Orleans cotton tried by me during the season in the Dholka and Dhundooka Talookas.

"2. In a previous better, I brought to your notice the insurmountable objection of cultivators to try any of the seed as a matter of speculation, and I was obliged to obtain sanction of Rs. 39-2-6 to defray cultivation expenses.

"3. The experiments have been carried out at a cost of Rs. 29-15-6, and I regret to state the result has been most unsatisfactory. Either from defects in the seed, or some other cause, no plants sprung up, except a few delicate ones, in the garden of the Assistant's bungalow at Dholka. In this exceptionary instance, the ground was occasionally watered, and the plants tended with the same care as garden produce; but, notwithstanding this, they soon died off,—thus affording rather negative proof as to the possibility of a general cultivation of this cotton with

any advantage. I should state that these few plants were of the later sowing, in October, while seed thrown into the same ground early in the rains did not come up at all. To show that this was not owing to defects in the soil, some country seed, sown in rows side by side with the New Orleans, sprung up and grew healthily.

"4. The New Orleans seed was sown at three different villages in each of the Talookas, and in soils differing in quality. The fact of its having only sprung up in the Dholka garden seems to class it with those foreign vegetables and flowers which can with great care be induced to spring up, but, from being unsuited to the climate, seldom or never attain to any perfection. If the seed had been materially injured, it appears obvious that it would not have sprung up at all."

Mr. Percival, Third Assistant Collector, reported, under date 9th December 1859, that,—

"The experiments with the New Orleans cotton seed have failed, owing to the heavy rains which fell after the seed was sown.

"2. The seed was distributed by the Mamlutdar of Veerumgaum, Mandul, Detroje, Seetapore, and Ogan, on 23rd August. In the first four places, it was then sown, but the heavy rain which followed made the ground swampy, and nothing came up. At Ogan, the seed was kept till a break in the rains, and was sown on 24th September; but rain fell at the end of the month, and the result was the same as at the other places.

"3. The season is not a favourable one for cotton, as there has been more rain than usual in this district, and the cultivators have in many places had to sow a second time. The New Orleans seed has, therefore, hardly had a fair trial; but, as far as it has gone, the result is not satisfactory, for country cotton sown at the same time and place at Detroje came up, whilst the New Orleans seed produced nothing at all."

Mr. Percival, in answer to a reference from the Collector, stated,—

"A portion (of the seed) was sown in Veerumgaum, by Koovera Mandun, in one acre of black soil, on the 25th August 1859.

"In Ogan, by Gail Kanmegh, in one acre of black soil, on 24th September.

"In Mandul, by Talja Gangjee, in one acre, on the 4th September.

"In Detroje, by Poonja Mooldass, in three acres of light sandy (goraroo) soil, on 31st August.

"In Seetapore, by Bechur Amla, in five acres of black soil, in August.

"As the Mamlutdar was not ordered, he did not keep any seed till November.

"The year has not been a favourable one for cotton, and I am informed that much sown early was destroyed; but I cannot think that this seed was carefully sown, or properly attended to. The Tulatee had some difficulty in getting any one to take it; the amounts were so small, and those who took it probably thought they would be put to much trouble and inconvenience about it, and were glad to see it destroyed.

"The experiment can be best made by giving not less than half a maund of seed to some cultivator, and promising him that he shall be allowed to sow it and gather it whenever he likes, and shall not be interfered with at all; and if the crop totally fails, that the assessment shall be remitted.

"Cultivators would be glad to take the seed on those conditions, and would be interested in its success; and if a good crop resulted, the experiment would not require to be repeated."

The experiments that have been undertaken by Mr. Daley, Superintendent of Cotton Experiments, will be reported on separately.

The Acting Second Assistant Collector in charge begs respectfully to add, that it is much to be regretted that the result of the experiments made by the Assistants in sowing the New Orleans cotton has proved unsuccessful. He would observe, that he entirely concurs in the opinion expressed by Mr. Weeding, in the 4th paragraph of his letter, that the seed appears unsuited to the climate, and can only be induced to spring up by the greatest care and attention being paid to it.

The Acting Second Assistant Collector in charge will

await any further instructions the Revenue Commissioner may think fit to issue.

(Signed) G. NORMAN,
Acting Second Assistant Collector in Charge.

(True copies)
(Signed) B. H. ELLIS,
Acting Secretary to Government.

No. 1648 OF 1860.

REVENUE DEPARTMENT.

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce.

SIR,—With reference to Mr. Acting Secretary Ellis' letter No. 1935, dated the 20th May 1859, I am directed to forward, for the information of the Chamber of Commerce, copy of the papers marginally noted, relative to the New Orleans cotton seed sent to Berar.

Letter from the Assistant Commissioner in charge West Berar, No. 243, dated the 16th April 1860.
Reply to, No. 1647, of this date.

—I have the honor to be, &c.,

(Signed) H. L. ANDERSON,
Acting Chief Secretary to Government.

Bombay Castle, 5th May 1860.

No. 243 OF 1860.

From Captain J. J. HAMILTON,
Assistant Commissioner, in Charge West Berar,

To B. H. ELLIS, Esq.,
Secretary to Government, Bombay.

SIR,—In continuation of my letter No. 652, of the 27th September last, intimating that the nine bales of cotton seed forwarded by the Bombay Chamber of Commerce had been received, but that, as the season for sowing the same had past, no experiment could be made with it until the next

sowing season, I have now the honor to report, that having tested the seed at different periods, and the same having failed, I am of opinion that it has lost its germinating quality.

Under these circumstances, I beg to be informed whether the seed might be sold, and the proceeds credited to Government.—I have the honor to be, &c.,

(Signed) J. J. HAMILTON,
Assistant Commissioner, in Charge West Berar.

Booldanah, 16th April 1860.

No. 1647 OF 1860.

REVENUE DEPARTMENT.

To Captain J. J. HAMILTON,
Assistant Commissioner, in Charge West Berar.

SIR,—I am directed to acknowledge the receipt of your letter No. 243, dated the 16th ultimo, and to inform you that the cotton seed therein referred to may be sold, and any balance that may remain in hand from the sale proceeds, after defraying the expenses incurred, should be remitted to the Secretary to the Chamber of Commerce at Bombay.—I have the honor to be, &c.,

(Signed) H. L. ANDERSON,
Acting Chief Secretary to Government.

Bombay Castle, 5th May 1860.

(True copies)
(Signed) H. L. ANDERSON,
Acting Chief Secretary to Government.

No. 2407 OF 1860.

REVENUE DEPARTMENT.

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce.

SIR,—With reference to the correspondence ending with

Government letter No. 1648, dated the 5th May last, I am directed to forward, for the information of the Chamber, copy of the papers as per margin, reporting the result of the experiment tried in Khandeish with the New Orleans cotton seed supplied by the Chamber.—I have the honor to be, &c.,

Memorandum from the Revenue Commissioner Northern Division, No. 1341, dated 19th June 1860, with its accompanying letter from the Collector of Khandeish.

(Signed) B. H. ELLIS,
Secretary to Government.

Poona, 5th July 1860.

Memorandum from the Revenue Commissioner Northern Division.

No. 1341 OF 1860.

REVENUE DEPARTMENT.

Revenue Commissioner's Office, Poona, 19th June 1860.

Submitted to Government for information, with reference to the correspondence ending with the Government resolution No. 724, dated 23rd February 1860.

2. The circumstance now reported confirms the conclusion already arrived at, that the seed was spoilt, and unfit for sowing.

(Signed) S. MANSFIELD,
Revenue Commissioner Northern Division.

No. 966 OF 1860.

From A. R. GRANT, Esq.,
Acting Collector of Khandeish,

To S. MANSFIELD, Esq.,
Revenue Commissioner N. D., Poona.

SIR,—With reference to your letter of the 28th April last, No. 977, informing me that the report promised in my memorandum of the 21st idem, No. 719, on the subject of the New Orleans cotton seed received from Bombay in May 1859 for experimental cultivation, is still awaited, I have the

honor to inform you, that I wrote once more to Mr. Shamrow Ramchunder on 23rd ultimo, but have not yet received any reply from him; although he told me, in the course of an interview which I had with him in April last, that he would submit his report when he returned from a trip he was then about to make into the Dang, on business connected with his contract with the Railway Company.

2. I was, however, informed by him, in the interview to which I have alluded, that of seventy (70) acres planted by him last year with the New Orleans cotton seed received from the Committee, only three (3) produced such a yield as could be called a crop at all, and that he believed the seed to have been damaged, and not fit for sowing.

3. As this information is, in all probability, the pith of the report expected from Mr. Shamrow, it may, perhaps, satisfy the Chamber of Commerce, and I have therefore thought it best to communicate it to you at once, without waiting any longer for a report, which is not likely to be of much interest.—I have honor to be, &c.,

(Signed) A. R. GRANT,
Acting Collector.

Khandeish, Collector's Camp, Suptshring, 11th June 1860.

(True copies)

(Signed) B. H. ELLIS,
Secretary to Government.

CULTIVATION OF EGYPTIAN COTTON.

No. 2595 OF 1860.

REVENUE DEPARTMENT.

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce.

SIR,—With reference to the correspondence ending with my letter No. 330, dated the 25th January last, I am directed to forward herewith a copy of the papers noted in the margin, relative to a

Letter from the Revenue Commissioner Southern Division, No. 1161, dated the 30th June 1860.

Government Resolution No. 2594, of this date, communicated to the Revenue Commissioner Southern Division.

further experiment made in planting Egyptian cotton in the Dharwar and Belgaum Collectorates, during the year 1859-60.

2. The samples of cotton referred to are also herewith sent.—I have the honor to be, &c.,

(Signed) B. H. ELLIS,
Secretary to Government.

Poona, 19th July 1860.

No. 1161 OF 1860.

REVENUE DEPARTMENT.

From J. N. ROSE, Esq.,
Revenue Commissioner Southern Division,
To B. H. ELLIS, Esq.,
Secretary to Government.

SIR,—With reference to the correspondence ending with your endorsement No. 990, dated the 17th March 1859, I have the honor to report, for the information of Government, the result of the further experiment of planting Egyptian cotton in the Dharwar and Belgaum Collectorates of this Division, during the year 1859-60.

2. The Collector of Dharwar, Mr. Goldfinch, has furnished no details, but reports in general terms as follows:—

"I have the honor to report that this experiment, like the previous ones, has proved a failure.

"I am of opinion that this variety is unsuited to the climate of the country, and that no advantage will be derived from making any further experiment."

3. Mr. Seton Karr, the Collector of Belgaum, reports as follows:—

"The seed was distributed gratuitously to some intelligent cultivators in the following districts:—

1, Badamee	4	villages,
2, Bagulkote	3	ditto,
3, Hoongoond	15	ditto,
4, Gokak	10	ditto,

5, Tasgaum ..... 7 villages,
6, Purusghur ..... 1 ditto,

which contain the best cotton land in this Collectorate. The cultivators were enjoined *to sow early*, and to *pick the cotton promptly* as it ripened, and I am informed that these injunctions were attended to.

"The result has been as follows:—

"In (1) Badamee, the cotton came up in two villages, and failed totally in the other two.

"In (2) Bagulkote, the cotton came up in one village, and failed totally in two.

"In (3) Hoongoond, the cotton came up in six, and failed in nine.

"In (4) Gokak, it came up in one, and failed in nine.

"In (5) Tasgaum, it came up in five, and failed in two.

"In (6) Purusghur, the seed was distributed in twenty-six lots, twenty-four of which succeeded, and two failed.

"It seems clear, that the seed was good, for otherwise its failure to germinate would have been general. Its partial failure must, I think, be attributed to bad management on the part of the cultivators, in storing it in some unfit place until used.

"I forward by banghy six packets, containing samples of the cotton from each of the six districts in which the experiment has been tried. The yield, I am informed, was scanty, and the operation altogether unprofitable; and the cultivators have expressed themselves unwilling to sow any more seed of the same sort.

"About 4lb. of the seed was sent by me to Dr. Gibson, and I should be glad to learn if in his hands the experiment has succeeded."

4. The result has thus been a failure in both Collectorates; and as no advantage seems likely to follow further experiments, I beg to recommend that they be not attempted.

5. The samples of cotton alluded to by Mr. Seton Karr will be handed on as soon as received.—I have the honor to be, &c.,

(Signed) J. N. Rose,
Revenue Commissioner Southern Division.

Poona, Revenue Commissioner's Office, 30th June 1860.

No. 2594 OF 1860.

REVENUE DEPARTMENT.

Dated Bombay Castle, 19th July 1860.

Copy of the Resolution passed by Government on a Letter from the Revenue Commissioner Southern Division, No. 1161, *dated the* 30*th June* 1860, *reporting the result of the further Experiment of planting Egyptian Cotton in the Dharwar and Belgaum Collectorates during the year* 1859-60.

The Governor in Council concurs with Mr. Rose in pronouncing the experiment in the Southern Mahratta Country a failure. The Revenue Commissioner should ascertain whether the experiment conducted by Dr. Gibson has been more successful.

2. Copy of these papers to be forwarded, with the samples, to the Chamber of Commerce.

(Signed) B. H. ELLIS,
Secretary to Government.

(True copies)

(Signed) B. H. ELLIS,
Secretary to Government.

DISTRIBUTION OF COTTON SEED.

From ROBT. WATSON, Esq.,
Chandah, Nagpore Province,
To H. BROOKE, Esq.,
Secretary Chamber of Commerce, Bombay.

SIR,—Referring to your letter to the Secretary of the Cotton Supply Association, published in the *Reporter* of 15th August last, I have the honor to state that, being interested in cotton, and intending to prosecute experiments in its cultivation, I shall feel greatly obliged by your forwarding to my address five bags each of Sea Island, Egyptian, and Orleans seed; and two Macarthy gins, if on hand—if not, any other description. Should your supply of seed be exhausted, be pleased to register my application as above for

consignment due in February next. On receipt of advice of cost of despatch of the above, remittance shall at once be made.

Enclosed is letter to the Secretary Cotton Supply Association, informing him of this application to you.—I have the honor to be, &c.,

(Signed) ROBT. WATSON.

Budrachillum, 25th December 1859.

No. 11 OF 1860.

To ROBERT WATSON, Esq.,
Chandah, Nagpore Province.

SIR,—I am directed by the Committee of the Chamber of Commerce to acknowledge your letter of 25th December, and in reply beg to state that the first supply of cotton seed has just arrived, and they have placed at your disposal,—

5 barrels American cotton seed.
1 barrel Sea Island do.
1 Macarthy gin.

The supply of these articles being but small, and intended merely for experimental purposes, the Committee are unable to comply with your application to the full extent.

The Macarthy gin, as received, does not appear to work very satisfactorily; but by a small alteration, effected by the Engineer of Messrs. Ewart, Latham, & Co. upon one of these gins imported and experimented upon by Messrs. W. Nicol & Co., the outturn has been much improved in quality. If you wish it, I can give directions to have the necessary alterations effected, or the gin can be forwarded in the state received from the maker.

The Chamber has no means of forwarding these articles to you, but will be happy to hand them to your agents, if you will direct them to apply for them.

The Report of the Chamber (which has been long delayed by the printers) will shortly be ready, and will be forwarded to you: you will find numerous papers of interest on the subject of cotton cultivation contained in it.

The Chamber will be glad to receive particulars of the result of your experiments, when completed.—I have the honor to be, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 4th February 1860.

No. 450 OF 1860.

REVENUE DEPARTMENT.

From the COMMISSIONER IN SCINDE,

To the CHAIRMAN BOMBAY CHAMBER OF COMMERCE,
Bombay.

SIR,—In continuation of my letter No. 87, dated 7th ultimo, I have the honor to inform you, that the supply of cotton seed (25 bags), referred to in your letter dated the 20th May, did not arrive in Scinde in time to admit of its being sown advantageously. In the Hydrabad and Shikarpore Collectorates, and in the districts under the Political Superintendent on the Frontier, the seed has been reserved, and will be sown in the ensuing season. The proper sowing time commences in March. In the Kurrachee Collectorate, some of the seed was sown in June, but as this was too late, the young plants died when about 3 inches high.

2. I shall furnish you with information as to the prospects of the crop at an early period of the ensuing season.

3. Should the Chamber of Commerce be able to furnish a small additional quantity of the seed, it might be sent to the Collector of Kurrachee, the greater part of whose supply has failed.—I have the honor to be, &c.,

(Signed) J. D. INVERARITY,
Commissioner in Scinde.

Commissioner's Office, Camp Nuggur Parkur, 17th Feb. 1860.

To J. D. INVERARITY, Esq.,
Commissioner in Scinde, Camp Nuggur Parkur.

SIR,—I have the honor to acknowledge receipt of your letter No. 450 of 1860, dated 17th instant, and hasten to for-

ward to you without delay per steamer, to the care of the Collector of Kurrachee,

5 barrels American cotton seed.
2 do. guano.

The seed has been tested in Bombay, and it appears to be of excellent quality.

The guano has been sent chiefly with the view of experiments with Native cotton, or other produce, as it appears doubtful whether, if successful, cotton could afford the expense of this manure; and it would probably be desirable to try the experiment with the American seed in the simplest mode possible, particularly in the first instance. If the American seed yields a fair return, it would be very desirable to save it next season, as, if kept unmixed with other varieties, the quality does not seem to deteriorate.—I have the honor to be, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 27th February 1860.

To the SECRETARY to the CHAMBER OF COMMERCE,
Bombay.

MY DEAR SIR,—Having seen an advertisement in the papers some time ago, that any one requiring Egyptian cotton seed to try experiments with may have it, I beg you will reserve a quantity for me; and if it cannot be sent here through a Government channel free of expense, I shall feel obliged by your keeping it in store for the present, and letting me know the quantity you can let me have, when I shall make arrangements for having it sent to me.

Last year I planted a small quantity of Egyptian seed in *red* soil, which I think is more adapted than the black. The plants nearly attained 6 feet. I am, therefore, desirous of trying the soil in three or four localities this season, and I shall do myself the honor of letting the Chamber know the result.—I remain, &c.,

(Signed) W. M. HEARN.

Belgaum, 20th March 1860.

No. 293 OF 1860.

From G. B. SETON KARR, Esq.,
Collector of Belgaum,
To the SECRETARY to the CHAMBER of COMMERCE,
Bombay.

SIR,—I have the honor to enclose a letter to my address, dated the 24th instant, from Mr. W. M. Hearn, regarding some Egyptian cotton grown by him in Belgaum last season, as an experiment, in irrigated land.

2. I also forward a sample of the cotton in a separate packet, and I shall feel obliged if you will favour me with the opinion of the Chamber upon it, for communication to Mr. Hearn.—I have the honor to be, &c.,

(Signed) G. B. SETON KARR,
Collector.

Belgaum, Collector's Office, 26th March 1860.

To G. B. SETON KARR, Esq.,
Collector of Belgaum.

SIR,—I herewith beg to forward a sample of cotton grown in my garden from Egyptian seed, which was sown in September last. The plants were irrigated every four days throughout November, December, and part of January. They reached within a few inches of six feet, and 14 plants produced 7¼lb. of cotton.

1 picked and 2 unpicked.

2. It is in my recollection, that in the published correspondence between the Collector of Belgaum and Dharwar and the Revenue Commissioner and Government, it is stated that the cotton plant, or the cotton, deteriorates by irrigation. However, as I have not the correspondence at hand, I cannot be positive on the point. The sample of cotton herewith forwarded is the produce of plants grown in *red* soil, and assisted during the greater part of three months by irrigation from a well, no more than ordinary care being bestowed upon the treatment of the plants.

3. I cannot myself speak from experience, but I am informed that the fibre of the sample herewith forwarded is very superior; but I shall feel obliged by your procuring a

professional opinion on the subject, with hints for my guidance, as I shall try some further experiments this year. It strikes me, that hitherto most of the seed of exotic cotton has been tried in black soil, and that Egyptian cotton is likely to grow better in red.

4. I have applied to the Secretary to the Bombay Chamber of Commerce for some Egyptian seed, and I shall feel thankful by your securing me a sufficient quantity to enable me to try experiments in three or four localities.—I have the honor to be, &c.,

(Signed) W. M. HEARN.

Belgaum, 24th March 1860.

No. 62 OF 1860.

To G. B. SETON KARR, Esq.,
Collector of Belgaum.

SIR,—By direction of the Committee of the Chamber of Commerce, I have the honor to acknowledge receipt of your letter No. 293 of 1860, dated 26th March, enclosing a letter from Mr. W. M. Hearn, on the subject of cotton cultivation.

The Chamber has forwarded to your address a sample of Sea Island cotton grown at Hooblee in 1859, and valued in Manchester at 1*s.* 2*d.* to 1*s.* 6*d.* per lb. The sample received from Mr. Hearn is not equal to this, as it appears to contain a large proportion of short fibres, which would reduce the value to probably 9*d.* to 10*d.* per lb.

By the 2nd May steamer, the Chamber forwarded to Mr. Hearn three bags of Egyptian Sea Island cotton seed, received direct per steamer from Egypt, by direction of the Cotton Supply Association of Manchester.

I beg to refer to the enclosed letter to Mr. Hearn, in reply to one received from him, upon the subject of pruning, and cotton cultivation generally.—I have the honor to be, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 16th June 1860.

To W. M. HEARN, Esq.,
Offg. Assistant General Superintendent, Belgaum.

MY DEAR SIR,—In reply to your note of 20th ult., I am sorry to say that the Sea Island cotton seed has been lost at sea; there has been, however, some Egyptian Sea Island ordered to be despatched at once to Bombay, and if it arrives in time, I will send you a portion by steamer to Vingorla or Coompta, if you will kindly inform me to whose care it should be despatched.

The sample of cotton pods received by the Chamber appears to contain seeds of different varieties, some being large, black, and very plump (and which are pure Sea Island), while others are downy, and of a different shape, being possibly hybrids. If you could have the plump black seeds separated from the others, and sown without admixture, you would, no doubt, find the produce much improved next season.

I send you a copy of the Chamber's Report, in which you will find numerous papers of interest relating to the cultivation of cotton.—I remain, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 2nd April 1860.

To the SECRETARY to the CHAMBER OF COMMERCE,
Bombay.

MY DEAR SIR,—Accept my thanks for your letter of the 2nd inst. I shall feel obliged by your forwarding the seed to the care of Messrs. Suggoon Rughoo, at Vingorla.

I shall attend to your suggestions about separating the seeds.

I have not yet received the Chamber's Report, which you say you have kindly sent me.

I have no doubt it will be of great use to me, and I shall peruse it with interest.

I have sent to the Collector of Belgaum specimens of cotton (Egyptian) grown by me last season, with a report, which I have no doubt will come before you; and I shall feel thankful by your contrasting the results of the seed

grown here with those of the seed planted at Hooblee, in the Dharwar Collectorate, by the firm of Messrs. Bryce & Co. —I remain, &c.,

(Signed) W. M. HEARN.

Belgaum, 7th April 1860.

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce, Bombay.

DEAR SIR,—I beg to acknowledge with thanks the copy so kindly sent by you of the very interesting "Report of the Bombay Chamber of Commerce for 1858-59."

On the subject of Egyptian cotton, I find we have arrived at the same conclusions, viz. that early planting is essential; that red soil is better suited to its cultivation than black; and that the spaces between the plants should be twenty inches at least, in order to secure a proper development.

No. 1192, 2nd April 1859.

I beg to send a sample of the cotton (packet No. 1) picked between November and January last, as also a specimen of the *second* crop, gathered within the last fortnight; and I shall feel thankful by your letting me have an opinion upon them.

I tried late planting also. Some seed was put down in August, but the plants never came to anything; and as there were no means of irrigation, they withered up before the end of November.

I shall also be obliged by your informing me whether the records under your charge show that any experiment in topping has ever been tried; and whether you are of opinion that it would be an improvement, by causing an increase in the number of lateral branches.

I hope you will be able to send me some seed by the next coast steamer, which leaves Bombay on the 2nd proximo, and I believe is the last one for the season.—I remain, &c.,

(Signed) W. M. HEARN.

Belgaum, 29th April 1860.

No. 63 OF 1860.

To W. M. HEARN, Esq.,
Belgaum.

DEAR SIR,—I have delayed replying to your note of 29th April, on the subject of pruning cotton plants, as some experiments on this system were being carried on by me, and have only lately been terminated.

I find that if pruning is adopted at unsuitable periods, the crop is totally lost, or rendered so small as not to be worth picking; it is therefore rather difficult to give an opinion as to what would be the best time of pruning at Belgaum. The following general principles may, however, prove useful, as indicative of the class of experiments that should be made:—

The cotton plant appears to have a period of four months from the time of the germination of the seed to the ripening of the first boll.

If sown in May and June, the first bolls will be at maturity at a period of rainy weather, and the crop will be lost; it becomes, therefore, necessary to retard the crop, in order to bring it into the dry weather of the months of December and January, when the first crop can be picked, and leave time for a second crop in April and May. This can be effected as follows.

As soon as the rains have in a great measure ceased, and the atmosphere becomes drier, the old large monsoon-leaves will drop off, and flower-buds will make their appearance. If at this time the plant be topped, and the growing end of the branches nipped off, the joints of the branches will throw out lateral shoots, which will only throw out flower-buds about a month to six weeks later. If, therefore, for example, flower-buds should appear on the 15th August, and the plant be topped, &c., the second supply of flower-buds will only be produced about the 30th September; and if the growing ends are again nipped off about the 15th October, the crop will be retarded till the 15th December, when the bolls will begin to ripen plentifully, and be picked from 15th December to 15th January. The plants may then be pruned to about 4 feet high, and about 10 inches from the stem, and fresh shoots will be rapidly produced. The growing end may be picked

off about the 31st March, and a second crop be picked from 15th to 30th May, or perhaps rather earlier.

It is very probable that the dates of these operations will have to be varied to suit the climate of Belgaum, and this can only be ascertained by the experiment of pruning and topping a few plants daily. It must, however, be borne in mind, that if the plants are pruned when, during heavy rains, they are growing luxuriantly, they will become weak and sickly, and if pruned when the bolls are well forward, the total loss of the crop will ensue, as nothing but a few small leaves will be the result.

It is obvious that European superintendence would be necessary in the beginning to bring a system of this kind to perfection; but if the plants are left to themselves, they will drop the first crop of bolls as useless, put forth new shoots at the proper time, and give a crop in December and another in May; but they become large, straggling, top-heavy, and weak, and do not give a crop in proportion to the area of ground they occupy.

I would suggest that a weather report be kept, and the dates upon which the several operations may be performed duly recorded, in order that, should you be unable to continue your experiments, the information may not be lost. In the several books about cotton cultivation, there are seldom any dates recorded, so that each individual has to begin an entirely new set of experiments for himself. This is a very great evil, and has, I believe, gone far to render the costly experiments of the East India Company totally valueless. We are told that one season the cultivation was successful, and in another a total failure; but no dates are given, and, as a rule, no clue whatever is afforded, as to the causes of success or failure.

Trusting that your labours may be more successful than those of others who have preceded you in the Belgaum Collectorate,—I remain, &c.,

(Signed) H. Brooke,
Secretary.

Chamber of Commerce, Bombay, 16th July 1860.

I enclose you a small sample of Sea Island cotton, grown at Hooblee by Messrs. A. C. Brice & Co. You will observe that it is superior to the sample sent by you to the

Chamber. Having been screwed into a small bale, its appearance is unsightly, but the quality is not injured.

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce, Bombay.

MY DEAR SIR,—Having observed your advertisement in the *Bombay Gazette*, I will feel obliged if, on the arrival of the Sea Island seed, you will send me ten or fifteen seers.

I tried the cultivation of some at Karinjah in 1857, and, where sown in favourable localities, it thrived remarkably well, the pods being of very large size, and the cotton excellent. The year following, I tried some more, in my garden at Hingolee. This also promised well, but, when the plants were about half grown, I had to leave the place for a couple of months, during which time there was some very heavy rain, and the plants, being altogether neglected by the gardeners, I found, on my return, that most of them had gone to the bad.

I have tried other seed, but none has answered so well as the Sea Island.

It will not be of much use sending me the seed unless it can reach this before the monsoon sets in.—I remain, &c.,

(Signed) G. DEGACHER,
Extra Assistant Commissioner.

Oomrawuttee, 11*th March* 1860.

To G. DEGACHER, Esq.,
Extra Assistant Commissioner, Oomrawuttee.

MY DEAR SIR,—In reply to your note of the 11th ult., I am sorry to say that the Sea Island cotton seed has been lost at sea. There has been, however, some Egyptian Sea Island ordered to be despatched at once to Bombay, and, should it reach in time, I will forward you some per banghy, as well as some of the American seed, which is of excellent quality.

I send you also copy of the Report of the Chamber of Commerce, in which you will find many interesting papers relating to the cultivation of cotton.

It is very desirable that some seed should be sown this season in your district, in order that, if successful, the experiment might be conducted on a larger scale next year, with the acclimated seed which you may be enabled to collect.—I remain, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 2nd April 1860.

GENERAL No. 86.

From Captain T. DAVIES,
Superintendent Berar Police,

To H. BROOKE, Esq.,
Secretary Chamber of Commerce, Bombay.

SIR,—I do myself the honor to enclose an advertisement, and would feel thankful for some cotton seed of the different kinds, some guano, and a little soda, &c., which can be despatched *via* Khandeish railway to Mulkapore in Berar, to my address, to the care of the Tahsildar, Mulkapore, to await Captain Davies's orders.—I have the honor to be, &c.,

(Signed) T. DAVIES, Captain,
Superintendent of Berar Police.

Camp Booldana, near Jaulna, 16th February 1860.

To Captain T. DAVIES,
Supt. Berar Police, Camp Booldana, near Jaulna.

SIR,—I am directed by the Committee of the Chamber of Commerce to acknowledge receipt of your letter No. 86, dated 16th February.

I was unable to comply with your request to forward the cotton seed *via* Khandeish railway, as the Company will not take charge of it. I have since arranged with one Kessoo, a broker, as per enclosed receipt, to undertake the conveyance of the seed to Mulkapore, in accordance with your directions,

and trust it will arrive in good condition. You do not mention any particular quantity ; I have therefore sent you 3 barrels (1 cwt. each) American cotton seed, 1 box guano, and 1 box nitrate of soda. Should this quantity be more than you require, the Committee will be obliged by your distributing the surplus to such persons as you think most likely to make a good use of it.

The Sea Island cotton seed was unfortunately lost at sea; there is, however, some Egyptian seed ordered, and, if it should arrive in time, I will forward some to you. Trusting that your experiments may be successful,—I remain, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 2nd April 1860.

ADULTERATION OF COTTON.

No. 3821 OF 1859.

REVENUE DEPARTMENT.

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce.

SIR,—I am directed by the Right Honorable the Governor in Council to forward to you the accompanying copy of a memorandum from the Revenue Commissioner Northern Division, with enclosures, on the subject of the deterioration of Wagurla cotton; and to point out that, in this case at least, the mercantile community have it in their power to obtain good cotton, by simply refusing to purchase any that may be mixed or adulterated.—I have the honor to be, &c.,

No. 1821, dated the 19th instant.

(Signed) B. H. ELLIS,
Acting Secretary to Government.

Bombay Castle, 27th September 1859.

No. 43 OF 1859.

To J. W. HADOW, Esq.,
Collector of Ahmedabad.

SIR,—With reference to your docket No. 1002, of the 9th instant, transmitting a correspondence in the original relative to the samples of the indigenous cotton of this Zillah, forwarded by me, and submitted by Government for the opinion of the Chamber of Commerce, I would beg to draw your attention to the first part of the 2nd paragraph of the letter No. 77 of 1859, from the Secretary to the Chamber of Commerce, from which it would appear that the Chamber is not aware that the pods of the Waguria cotton do not burst, or open, like the other varieties of cotton, and allow the kuppas to drop, and mix with the leaves and dirt. The pods are picked off the plants entire, and carted to the warehouses, after which they are distributed amongst the women and children to have the kuppas extracted out of the khulla. By paying a pice extra per maund, the insect-stained cotton is separated from the good cotton, which is all that is required, and the cotton is then as free from all impurities as the samples forwarded by me, and any quantity of such clean cotton can be obtained in this Zillah. By the Banians withholding this paltry remuneration, a really good staple is sent to the market in a deteriorated state.—I have the honor to be, &c.,

(Signed) C. DALEY,
Superintendent Cotton Experiments.

Dholka, 31*st August* 1859.

No. 1150 OF 1859.

Submitted to the Revenue Commissioner Northern Division, for communication to the Secretary Chamber of Commerce, with reference to paragraph 2 of his letter No. 77, dated 6th July 1859.

Revenue Commissioner's endorsement No. 1371, dated 28th July 1859.

(Signed) J. W. HADOW,
Collector.

Ahmedabad, Collector's Office, 10*th September* 1859.

No. 1821 OF 1859.

REVENUE DEPARTMENT.

Submitted for the information of Government, and for communication to the Chamber of Commerce, with reference to the Government resolution No. 2809, dated the 19th July last.

2. If, as stated by Mr. Daley, the deterioration of the Waguria cotton is due to the conduct of the Banians, it is clearly his duty to endeavour to prevent it, by explaining to them the advantages which they would derive by sending a superior quality of cotton to the market. He has been informed accordingly, through the Collector of Ahmedabad.

(Signed) E. G. FAWCETT,
Revenue Commissioner Northern Division.

Revenue Commissioner's Office, Poona, 19th September 1859.

(True copy)
(Signed) B. H. ELLIS,
Acting Secretary to Government.

No. 4005 OF 1859.

REVENUE DEPARTMENT.

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce.

SIR,—With reference to your letter No. 87, dated the 9th August last, I am directed by the Right Honorable the Governor in Council to forward, for the information of the Chamber, copies of the documents marginally quoted.—I have the honor to be, &c.,

Letter from the Revenue Commissioner Southern Division, No. 1866, dated the 9th September 1859.

Government resolution of this date, No. 4004, communicated to the Revenue Commissioner.

(Signed) B. H. ELLIS,
Acting Secretary to Government.

Bombay Castle, 11th October 1859.

No. 1866 OF 1859.

REVENUE DEPARTMENT.

From J. D. INVERARITY, Esq.,
Revenue Commissioner Southern Division,

To B. H. ELLIS, Esq.,
Acting Secretary to Government.

SIR,—I have the honor to reply to the 4th and 5th paragraphs of the Government resolution No. 2926, dated the 25th ultimo, wherein suggestions are invited from the Collector, the Superintendent Gin Factory, Dharwar, or this department, on the best possible means of preventing the adulteration and intermixture of cotton.

2. I referred the question to the Collectors of Belgaum and Dharwar, and to Dr. Forbes. The following is the substance of their replies:—

3. Mr. Seton Karr, Collector of Belgaum, premises that the cotton referred to, which it is desirable to preserve free from adulteration, is, of course, the New Orleans; and he adds,—

"The object in view is not easy of attainment. During my tour, last season, I ascertained, by personal observation, that a large breadth of land had been sown with New Orleans and country cotton intermixed, and of course nothing could prevent the wool of the two sorts from being mixed in picking. All I could do was to impress on the people how requisite it was, for their own interest, to keep the two species quite distinct. It is necessary, however, to use great caution in interfering on such a point. The ryots are very easily alarmed, and, if subjected to annoyance, or to any injudicious interference on the part of the Native officials, they are not at all unlikely to relinquish the cultivation of cotton in favour of some other produce. Some years ago, a large decrease in the cotton cultivation of the Southern Mahratta Country was attributed partly to the scoldings which the ryots got on this very point, and to the dislike which was created to having any concern with it, if not allowed to please themselves.

"I think the most judicious course would be for the cotton merchants in Bombay to act, as much as possible, on

the traders and middle-men, by whom the cotton is purchased directly from the ryots. More could be effected, I believe, by their means, than in any other way. The European and Native officers of Government should also continue their endeavours to prevent admixture in the sowing, or afterwards in the packing of the bales, but they should be cautious in their interference.

"Regulation III. of 1829 deals with the subject as far, perhaps, as it is safe for legislation to go. Self-interest in such a matter is likely to effect more than any other motive, and that can be most effectually operated on by those who take the cotton off the growers' hands, and without whose connivance the practice of admixture could not obtain."

4. Mr. Stewart Gordon, First Assistant Collector in charge, Dharwar, forwards "a letter from Dr. Forbes (given below), whose experience gives great weight to his opinions"; and he adds,—

"The chief difficulty is the indolence of the cultivators, who reap such a large profit from the careless cultivation of mixed cotton, that they will not, unless compelled, take the trouble to procure unmixed seed.

"I see no remedy but to strike at the root of the matter, by forbidding the cultivation of mixed cotton, and empowering the revenue officers to pull up the young plants, leaving it to the cultivators to elect which of the varieties shall be uprooted and which preserved.

"I am confident that, if authorised to interfere to this extent, in the second season there would be no mixed cotton sown throughout the Dharwar Collectorate. The mixed cotton cannot be, and never is, picked separately; and, when once mixed in the picking, nothing can separate the two varieties.

"Thus, if the mixed sowing be got rid of, and the Draft Act (of 16th January 1858) passed into law, with the verbal correction in Section II. as pointed out by Dr. Forbes in the 6th paragraph, the object of Government will, in my opinion, be obtained; and the more stringent the law is, the less necessity will there be for continuance of Government interference with the cultivation of, and trade in cotton."

5. Dr. Forbes, in his letter referred to by the First Assistant in charge, Dharwar, states that,—

"In deciding as to what should best be done with a view to securing the cultivation of New Orleans cotton free from admixture with the Native variety, there is but a choice of two measures, viz. the employment of persuasion or compulsion. The former would of course be most desirable, but my belief is that it cannot be used with advantage or success, notwithstanding any inducements that may be offered, in the shape of prizes, rewards, &c.

"2. Hitherto the cultivation of American cotton has always been a profitable and safe investment, yielding returns which have enriched a large proportion of the cultivators, and with which all of them are satisfied; so much so, that it is needless to attempt impressing upon them the fact that a little more honesty, as well as trouble bestowed in procuring a better article, would inevitably increase their profits.

"3. My connection with the Factory causes me to see a great deal of the Cotton cultivators, and I seldom miss an opportunity of representing the advantage to themselves that a very trifling amount of extra trouble would ensure. Where adulteration is wilfully practised, it is of course hopeless to expect that any attention would be paid to such advice; but where this was not the case, the replies of some betrayed the general feelings of all,—'It pays us very well as it is, why should we take any more trouble with it?'

"4. I have formerly had occasion to mention that I did not believe that prizes or rewards to any amount would stimulate competition: one or two individuals might exert themselves for the occasion, with a view to securing the prize, merely for the sake of its value, if it was sufficiently tempting; but any desire for distinguishing themselves in the promotion of a public benefit would be looked for in vain.

"5. I have dwelt upon these points, because I wish to show that, in recommending a compulsory measure, I do so from a clear conviction that no other resource is left; and my long residence in this part of the country, and acquaintance with the cotton-growing ryots, ought to enable me to form an opinion on the subject.

"6. In a former communication (sent to Government with Revenue Commissioner Southern Division's letter No. 2990, of 9th November 1853) to the Revenue Commissioner, dated 13th October last, paragraph 13, it was suggested, with reference to the new Draft Act of 16th January 1858, that 'exposing to sale different varieties of cotton mixed in the same bale' should also be considered penal, with a view to obviating the evil now under consideration; but, on further consideration, as this might probably not be taken by the grower as applicable to himself, it would, I think, be also necessary to introduce a clause forbidding mixed cultivation, as regards American cotton, under a penalty of fine or confiscation of the crops. At the proper period for thinning and weeding, the plants are so easily distinguished from each other, that there would be no difficulty whatsoever in separating them, and this was done last season to a very considerable extent.

"7. To provide against evasion, the Mamledars and Mahalkurees should be required, at a stated period, to visit the American cotton-fields in their respective districts, and to report upon their having no admixture of the Native variety. The Assistant Collector in charge should also be required to exercise a personal supervision, to such an extent only, however, as would suffice for securing the proper attention of his subordinates to this duty; and, as a final check, it should be made part of the duty of the Superintendent Cotton Gin Factory to visit the districts at the cleaning season, and, whilst inspecting the condition of the machinery, he should also be required to report upon the freedom of the seed from admixture. Evasion of the provisions of the Act should only be held to have taken place after the crop has arrived at maturity."

6. On this same subject, I, in my letter No. 1479, dated the 9th June 1858, wrote as follows:—

"Para. 11. Adverting to the observations of the Chamber of Commerce in their Secretary's letter No. 38, dated 13th April 1857, relative to the admixture of inferior Native kuppas with the American staple, and of the seeds of the two kinds at the time of sowing, I beg to state that the prevention of the mischievous practice has never been lost sight of. Personal influence is exerted, self-interest is appealed to, and every opportunity is taken of impress-

ing, both upon growers and dealers, the importance of preserving the purity of the staple; but the evil complained of will not be completely remedied so long as a ready sale is obtained for mixed cotton, and will be effectually cured only when experience has convinced the dealers that every bale of such cotton will be positively refused by the merchants interested in the trade. Mr. Gordon, First Assistant Collector at Dharwar, notices 'that he was told by the agent of Messrs. Brice & Co. at Bunkapore, that at the commencement of last season his contractors brought him nothing but most execrable cotton, but that when he *resolutely refused to receive it*, they managed to provide cotton of a superior quality.'

"Para. 12. Government have already resolved, that the necessity for any alteration of the law for the prevention of adulteration of cotton has not yet been shown; and add,—'It is a sound principle in commercial polity that the Government should refrain from authoritative interference with the regulation of domestic trade, except with the view of preventing fraud, and protecting the fair dealer.' If, then, merchants will be but true to themselves, they will find the local authorities always ready to co-operate, and to enforce the law wherever adulteration and fraud may be shown to exist."

7. The Committee of the Cotton Supply Association now strongly recommend that steps should be taken to prevent the admixture of exotic with indigenous seed in cultivation, for the purpose of adulteration. If Government concur in this recommendation, a clause might be added to the "Bill for the Better Suppression of Frauds in the Cotton Trade in the Presidency of Bombay" (read a second time in the Legislative Council on the 16th January 1858—*vide* page 316 of *Government Gazette*), which should prohibit, under a penalty, mixed cultivation as regards American cotton.—I have the honor to be, &c.,

(Signed) J. D. INVERARITY,
Revenue Commissioner Southern Division.

Poona, Revenue Commissioner's Office, 9th September 1859.

No. 4004 OF 1859.

REVENUE DEPARTMENT.

To the REVENUE COMMISSIONER SOUTHERN DIVISION.

Copy of the Resolution passed by Government on the communications marginally quoted, having reference to the adoption of measures for preventing the Adulteration and Intermixture of Cotton.

From the Secretary to the Chamber of Commerce, No. 87, dated the 9th August 1859.
From the Revenue Commissioner Southern Division, No. 1866, dated the 9th September 1859.

These communications may be considered together, as the subject is the same.

2. The Right Honorable the Governor in Council fully concurs in Dr. Forbes' opinion, that persuasion is not likely to prevent the adulteration of cotton, so long as the grower finds that it pays him to adulterate. But His Lordship in Council does not concur in the conclusion drawn by Dr. Forbes, that, because persuasion is of no effect, therefore complusion is necessary.

3. In another letter, Dr. Forbes advocated a different course. He suggested that the merchants should decline to receive mixed cotton. His Lordship in Council is of opinion, that if this course were adopted, the grower, finding that his mixed cotton did not sell, while the unmixed commanded a higher price, would soon be taught, by his own interest, to abandon a practice which he now continues only because it is profitable. Such a combination on the part of merchants would not be open to the objections properly taken to combinations to raise or depress prices. On the other hand, the amount of Government interference which would be necessary, to carry out the Chamber's suggestions for interfering with the ryot's operations in the field, is likely to check the cultivation of cotton. His Lordship in Council therefore concurs in the views expressed in Mr. Seton Karr's letter, quoted by the Revenue Commissioner, and in Mr. Inverarity's own opinion, as expressed in his letter No. 1479, of the 9th June 1858.

Received through the Revenue Commissioner Southern Division, and forwarded to the Chamber of Commerce.

4. His Lordship in Council will again recommend to the

Chamber, that the mercantile community should themselves endeavour to work out the reform, by steadfastly refusing to receive mixed cotton. In Guzerat, mercantile firms might establish cotton presses at Gogo, and instruct their agents to purchase only unmixed cotton. In the Southern Mahratta Country, similar orders might be given to the local agents. It is not until every other method has been tried and failed that Government should interfere authoritatively.

(Signed) B. H. ELLIS,
Acting Secretary to Government.

Bombay Castle, 11*th October* 1859.

(True copies)

(Signed) B. H. ELLIS,
Acting Secretary to Government.

No. 130 OF 1859.

To B. H. ELLIS, Esq.,
Acting Secretary to Government, Bombay.

SIR,—By direction of the Committee of the Chamber of Commerce, I have the honor to acknowledge reciept of your letters No. 3204 of 1859, dated 15th August, No. 4005 of 1859, dated 11th October, No. 4304 of 1859, dated 31st October, and No. 4437 of 1859, dated 9th November, all relating to the important subject of cotton cultivation.

The Committee fully concur in the closing sentence of paragraph 4 of the resolution of Government, that "it is not until every other method has been tried and failed that Government should interfere authoritatively" to check the admixture of the Native and American seed in cultivation; but they must express their regret that the means suggested (namely that the merchants should refuse to buy mixed cotton, or should establish agencies in the interior to purchase pure cotton) is quite impracticable.

Upon numerous occasions, the Government has called upon the mercantile community to check adulteration and fraudulent admixtures, apparently under the impression that it was specially a merchants' rather than a planters' question,

and that the former were deeply interested in purchasing a pure article. This, however, is by no means the case: the whole business of a merchant is to buy in the cheapest, and sell in the dearest market; and if he believes that, taking price into consideration, he will reap a higher profit from the purchase of adulterated saw-ginned cotton than he will from the finest Broach cotton, he will purchase the adulterated in preference to the pure article; and no combination that could be devised would prevent this principle being carried into effect. The greater the adulteration, the lower the price will be, and the general standard of the article will be lowered accordingly. To exemplify this more clearly, it may be useful to point to the relative positions of the different descriptions of cotton at different periods;—thus, the prices in Liverpool at the following dates were as follows:—

Date.	Mid. Orleans.	Fair Dharwar Saw-ginned.	Fair Broach.	Fair Coompta.
1st Aug. 1850.	8*d.*	7*d.*	6⅛*d.*	5⅜*d.*
„ 1851.	4¼*d.*	4¼*d.*	3¾*d.*	3¼*d.*
„ 1858.	7⅛*d.*	5⅞*d.*	5¾*d.*	5⅜*d.*
„ 1859.	7⅛*d.*	5½*d.*	5½*d.*	5¼*d.*

It will be seen, therefore, that while in 1850-51 the difference in value between Dharwar saw-ginned and Coompta cotton was 1*d.* to 1⅝*d.* per lb.; in 1859, in consequence of constantly increasing adulteration, this difference had fallen to ¼*d.* per lb.

It is, however, quite possible, that the merchant may throughout this period have derived fully as large a profit from the American seed cotton as from the Native Coompta; but the cultivators, as a class, have lost all the advantage they would have derived from improved *quality*, and the cultivation is only continued because the *yield* is greater than of Native cotton.

It will be naturally asked—Why does not the grower see his own interest, and produce pure cotton, and gain a further 1½*d.* per lb.? The reason is simple: the ryots are men of

small means cultivating small patches of land, the produce of which is sold with other cotton from numerous other fields, all of which is mixed together as it comes to hand, and in the aggregate of 20 separate fields does not produce perhaps more than a parcel of 50 or 100 candies; this parcel, being sold or contracted for in the aggregate, the identity of each individual small crop is lost, and the careful cultivator derives no advantage whatever from his extra labour. It becomes, therefore, his interest to do no more than his neighbours do.

It is this peculiar position of the internal cotton trade that seems to call for a mild legislative measure to ensure a generally improved class of cultivation, as all the cultivators of American cotton would alike benefit from the increased commercial value of their produce.

The Chamber is, however, equally averse with the Government to any unnecessary interference with private rights, and they would, therefore, not recommend such severe measures as confiscation, or heavy penalties, but would suggest that the required end might be attained by empowering the local authorities to inflict small fines, not exceeding, perhaps, 8 annas per acre upon those cultivators who neglected to weed out the Native plants from the American cotton. They would not recommend that it should be incumbent upon the Native officers to inspect the fields, but would leave it to the neighbours of the negligent cultivators to inform against them at the local offices, where the fines might be summarily inflicted.

It is possible, that if it were explained to the chief cultivators that this law was passed solely for their own benefit, and that Government did not wish to interfere with them except on their own information, it might become the practice to weed the fields without further hesitation. If the law were wholly inoperative, as it might very likely be, the cultivation could not certainly be worse than at present.

It appears to the Chamber, from the numerous communications of Dr. Forbes, that this deterioration of the produce is not to be traced to a wilful admixture of the Native with the American seed, but rather to the result of hybridising. Thus, assuming that in 1850 the total amount of Native plants in a field of cotton should be only one per cent., and that this one per cent. would hybridise the seed of five plants in its

vicinity, we should have the following formula of progressive deterioration:—

	Native Seed.
1850.—1 per cent. of Native plants would hybridise 5 per cent., and would yield.....	2½ per cent.
1851.—2½ per cent. of Native plants would hybridise 12½ per cent., and would yield ...	6 do.
1852.—6 per cent. of Native plants would hybridise 30 per cent., and would yield....	15 do.
1853.—15 per cent. of Native plants would hybridise 75 per cent., and would yield..	37½ do.
1854.—37½ per cent. of Native plants would hybridise the whole, and would yield....	50 do.

Assuming this view to be correct, the present crop of American cotton is nothing but a hybrid betwen the Native and the American; but as a hybrid tends constantly to return to its original character, the relative characters of the two plants are not really permanently changed, but merely mixed together, as it were, mechanically, and the whole cultivation presents the appearance of Native and American plants intermixed. If, however, the Natives could by any means be induced to weed out all the Native plants, the American would soon revert to its original purity, and regain the commercial value it held five years ago.

The distribution of pure American seed by the Cotton Supply Association will hardly check the evil, as the quantity thus obtained can only be small, and it is always liable to the chance of its germinating power being lost, by heating or other causes, during the sea voyage, when the labour of the cultivator will be totally lost, and experiments with this description become justly unpopular with the Natives.

In conclusion, the Chamber would express their conviction that the Government is anxious to promote the cultivation of cotton by every safe means, and, while offering the foregoing suggestions on the subject, they fully recognise the difficulty of the question, and the necessary caution that should be employed in dealing with Native habits and prejudices. In entering thus at length into what appear to them the causes of the deterioration, the chief object of the Chamber has

been to remove the impression that the merchants themselves have any means at their disposal of acting directly or indirectly on the ryots, except by a diminution of price; and which, for the reasons stated, cannot operate on the cultivation with any force, when the acts of the individual ryots are almost wholly merged in the general proceedings of the community at large.—I have the honor to be, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 30th November 1859.

No. 984 OF 1860.

REVENUE DEPARTMENT.

To H. BROOKE, Esq.,
Secretary Chamber of Commerce.

SIR,—With reference to your letter marginally noted, I am directed to forward copy of a communication from the Acting Revenue Commissioner Southern Division, No. 337, dated the 24th ultimo, on the subject of the means to be adopted for preventing the admixture and adulteration of cotton.

No. 130, dated the 30th November 1859.

2. The view taken by Government in a previous resolution is fully borne out by the reports of the local officers.

3. His Lordship in Council would especially request the attention of the Chamber to the facts stated by Dr. Forbes regarding the cotton crop of the Bunkapore and Seegaum districts. It is hoped that the Chamber will be able to secure this cotton for shipment to England.

4. Attention is also requested to Dr. Forbes' remarks regarding future consignments of seed for experiments.—I have the honor to be, &c.,

(Signed) B. H. ELLIS,
Acting Secretary to Government.

Bombay Castle, 10th March 1860.

No. 337 OF 1860.

REVENUE DEPARTMENT.

From J. N. ROSE, Esq.,
Acting Revenue Commissioner Southern Division,
To B. H. ELLIS, Esq.,
Acting Secretary to Government.

SIR,—I have the honor to acknowledge the receipt of the Government memorandum No. 4822, of the 5th December last, wherewith was forwarded, for report, copy of a communication from the Secretary to the Bombay Chamber of Commerce, on the subject of the admixture and adulteration of cotton, and the means to be adopted for preventing the same.

2. The Acting First Assistant Collector, late in charge of Belgaum, Mr. D'Oyly, to whom, and to the Collector of Dharwar, and Dr. Forbes, the subject was referred by my predecessor, offers the following remarks. He says:—

"I think that any penal legislation to prevent the cultivators from sowing American and country cotton in the same field would either be inoperative, or, if brought into force, would be attended with the worst consequences. If the ryots found that they could not sow the cotton as they pleased, they would, I am convinced, give up sowing the American seed altogether, and sow only the country seed, which they could cultivate without molestation. If the existence of such a law were known to the ryots, I believe they would refuse to sow the American seed in future. No cultivator would subject himself to the inconvenience to which he would be subjected by being called upon to answer a complaint that he had not weeded the country from the American cotton, even though the complaint were false, and brought, as it invariably would be, out of enmity.

"2. The cultivators might be acted on through the traders to whom they sell their cotton, but these latter are too apt to fix, in combination, the price of cotton throughout the district, without giving the cultivator sufficient advantage in price if he produces cotton better than the ordinary run."

3. Dr. Forbes writes as follows; and the Collector of

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Dharwar, Mr. Goldfinch, refers to this officer's letter "as containing what appears to the Collector to be a very clear, correct, and reasonable exposition of the whole question." Dr. Forbes observes:—

"There can be no doubt that the rule which governs ordinary mercantile transactions is to buy at the cheapest and to sell at the dearest market; but where this is adhered to, the purchaser has no cause to complain of the quality of the produce, if, for his own individual advantage, he prefers purchasing the inferior article whilst the superior is at his disposal.

"This particular case however, I think, presents an exception to the usual rule. The outcry from home is to the effect that the proper quality of produce is not procurable; that the resources of the country are not being developed; that India is capable of supplying a superior article to that with which the consumers are now served, and which might render them more independent of other sources, which are considered precarious. At the same time, it is here admitted that this better quality of articles *is* procurable, but that it must give place to the inferior, which for the time being realises a better profit to the merchant. This not only offers a premium upon adulteration, but it also excludes the home manufacturer from ever seeing the proper article, because he can only do so through the merchant, who is, virtually, his agent.

"Even where the trade of a country was fully established, its decline might be anticipated if such a system was invariably pursued; but where, as in the present case, the object in view is the introduction of a foreign or exotic article, which as yet may be said to have its reputation to establish in the home market, it is scarcely possible to hope that its cultivation can be successfully extended, unless it can obtain the support of a little more liberal consideration.

"No steps that can be taken, either by Government or otherwise, towards enforcing or obtaining purer cultivation, can be of any use, so long as the better quality is not appreciated; and the grower can hardly be expected to discover his interest in producing it, when he finds that he obtains a more ready market for the impure and adulterat-

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ed article, which probably, for the occasion, pays him just as well as it does the merchant.

"But even if the cultivator exerted himself to the extent expected of him, the case would be in no way improved. Adulteration is the trade of the Native broker, and so long as he remains the medium of communication between the grower and the Bombay merchant, it is hopeless to expect that the produce of the country will arrive at the home market in a pure condition, let it be cultivated, picked, and cleaned, ever so carefully.

"I know that this is also the opinion of the roots and dealers by whom the American cotton is ginned in this quarter. In the Bunkapore and Seegaum districts, where a very considerable addition has been made this season to the cultivation of the New Orleans plant, the fields have been cleared of admixture with the Native variety in a manner that was most satisfactory to notice. I examined them during my recent tour, accompanied by their owners, who pointed to what they had done, in fulfilment of a former promise, and at the same time they stated that they were most desirous that their cotton should go to England in its present pure state, in order that it might obtain the name that they knew it deserved, and of which they would ultimately reap the benefit; but that, nevertheless, they knew that it had not the most remote chance of doing so through the Coompta brokers, who would only use it for admixture, so as to pass off their up-country inferior cottons.

"This circumstance might, I think, with advantage be brought to the notice of the Chamber of Commerce. It is a voluntary commencement on the part of the owners of the cotton-fields to get rid of that evil which has been so much complained of: if supported, it will doubtless spread to the whole of the American cotton cultivation, and render any coercive interference unnecessary.

"It does not become me to question the soundness of an axiom laid down by experienced merchants, but I think there are cases where it might be advantageously deviated from, and that this is one of them. By securing the purchase of the better article, even at the sacrifice of a little immediate profit, there can be no doubt that more than an adequate advantage would ultimately accrue to all con-

cerned. What is wanted is a trustworthy local European agency, such as would obviate the necessity that at present exists for this produce passing through the hands of the Native brokers. This is here stated to be 'quite impracticable'—and if such is really the case, it becomes an insurmountable obstacle; but, for my own part, I do not take this view of it. I believe that, sooner or later, it must and will be effected.

"Referring to the 8th paragraph of the letter under report, I do not at present recollect the communications in which I supported the theory of 'hybridising'; but, if I did at one time hold such an opinion, I have certainly since then met with sufficient grounds for modifying it.

"I believe that the indigenous and American varieties do not readily affect each other in this respect, or, if they do, that the change in the offspring is so very slight, that it cannot readily be distinguished from the exotic parent. On the other hand, the two varieties, seen growing together in mixed cultivation, are just as distinct from each other as those of separate fields. I have over and over again examined the supposed hybrid in all its stages, and found it invariably true to the Native plant in every characteristic. Recently, also, when examining the cotton cultivation in the Assigned Districts, in company with the Commissioner, Major Meadows Taylor, we made this the subject of careful observation, and he was of the same opinion that I have now stated.

"I conclusion, I beg to express a hope that the recent failure will not discourage the Chamber of Commerce from procuring further supplies of fresh American seed. It is not necessary that the quantity should be large: about 400lb., or sufficient for 50 acres of land, every second season, would suffice; because there would be no trouble whatever in preserving the produce of this for distribution during the ensuing year, and it would be a sufficient infusion of new seed.

"Very likely, close confinement in the hold of a vessel was the cause of the last misfortune, and a smaller quantity might probably without inconvenience be stowed away in a more suitable situation. Precautions could be taken to prevent loss to the ryot by proving the seed before dis-

tributing it. On the last occasion it arrived so late that this could not be done, for, in order to secure its being sown at all, it had to be forwarded to the districts immediately upon its arrival."

4. I have nothing to add to what has been stated by Dr. Forbes, whose views, as being those of an officer practically acquainted with the subject, appear to be deserving of consideration.—I have the honor to be, &c.,

(Signed) J. N. ROSE,
Acting Revenue Commissioner Southern Division.

(True copy)
(Signed) B. H. ELLIS,
Acting Secretary to Government.

Revenue Commissioner's Camp, Sattara, 24th Feb. 1860.

No. 32 OF 1860.

To H. YOUNG, Esq.,
Chief Secretary to Government, Bombay.

SIR,—By direction of the Committee of the Chamber of Commerce, I have the honor to acknowledge receipt of your letters No. 984, dated 10th March, and No. 1183, dated 27th March, having chiefly, reference to the cultivation of cotton in the Southern Mahratta Country.

The opinion against the adoption of penal measures to secure the cultivation of unmixed cotton are so strong, that the Chamber cannot but concur in the decision of Government to allow the ryots to cultivate in whatever mode they may deem most conducive to their own interest. The Chamber, however, believes that the discussion has not been without effect, in inducing the ryots to adopt to some extent those measures which it was proposed to promote by legislative interference.

The largely increased breadth of cultivation with exotic cotton in these districts, and the generally improved quality of last season's produce, are satisfactory evidences of an advance on the part of the ryots; and the Chamber trusts that

the increased profits obtained by the producer will shortly bring about a still further extension of cultivation.

The great obstacle to an European agency in Dharwar is the length of time required to convey the cotton to the shipping port, and, from the peculiarity of the monsoons which affect that district, the short period into which such transport is confined. The cotton is picked in March, but cannot be brought in any quantity to the coast for shipment to Bombay before the following December, the state of the roads being an insurmountable difficulty. Good metalled roads, and bridges over the rivers and nullas, would doubtless effect much in reducing this delay; and the Chamber cannot but urge upon Government the necessity of taking steps to improve the communication.

The Cotton Supply Association have shipped several parcels of American seed this season, but an extraordinary series of mishaps has attended the vessels by which the shipments have been made, no less than three ships out of four having been totally lost. The quantity of seed available has therefore been reduced to 26 barrels, of which five have been placed at the disposal of Dr. Forbes. The quality and condition of the seed is excellent, and will doubtless give a good result.

It is matter of great gratification to the Chamber to hear of the success that has attended the experiments of Captain Meadows Taylor in the Ceded Districts, and they look with much interest to their further development; the quality of the cotton (cleaned by the common Berar churka) leaves nothing to be desired.

Much interest is felt in the promised experiments with the new gin of Dr. Forbes, which, if successful, will no doubt go far to increase the supply of cotton, as labour is stated to be scarce in the northern districts, and the Natives are extremely anxious to have the means of bringing their produce early to market.

The Chamber has observed that the Government have closed the last of the establishments for the experimental cultivation of cotton lately conducted by Mr. Daley. It certainly would appear that the trials at Dholka and Gogo have been complete failures; but as that at Dhundooka seems to have been moderately successful, and as Dr. Forbes will

have an opportunity of expressing his opinion on the prospects of further experiments, the Chamber would, in the event of a favourable report, be prepared (on behalf of the Cotton Supply Association) to contribute to a moderate extent to the salary required by the manager of the Government establishment there, in order that the seed should be sown again this season. Should the quantity of seed be sufficient, it might be either sold, or given away to those ryots who would be willing to accept it, in order that, being now acclimated, the opportunity should not be lost of carrying on its cultivation under favourable auspices. The weekly reports furnished to the Chamber by the Dhundooka establishment would, if properly kept up, be of great service, in enabling them to prepare a treatise on the cultivation of exotic cotton. Should Government accede to this suggestion, the Chamber will without delay give such directions to the manager referred to as will ensure the practical utility of the experiment.

The Chamber do not think it necessary to discuss further the vexed question of hybridising, as, although interesting in a scientific point of view, it appears that all parties are agreed as to the necessity of removing the Native plants from the American fields; and it is therefore of little real practical importance to ascertain whether their appearance is due to wilful admixture, or to natural causes.

Now that the special establishments for the experimental cultivation of cotton are closed, the Chamber would venture respectfully to submit whether it might not be desirable to intimate to the various Collectors in this Presidency, that Government still regard the question with interest, and that if they, or their subordinates, are willing to make trials on a small scale, the Government are not unwilling to sanction the expense. It must be many years before private enterprise can take the initiative in the interior, and these small experiments, while of trifling cost to Government, might result in indicating those districts which are suitable to the cultivation. The Chamber has been chiefly induced to offer this suggestion by the unexpected success which seems to have attended the experiments of Captain Meadows Taylor. In former years, those of Mr. Alexander Elphinstone, at Rutnagherry, appeared also to give hopes of success; but his

removal to another district brought them to a premature conclusion. It would seem, that in most cases where care and intelligence had been brought to bear on the plant, success attended the experiments; so that, by leaving it to the Collectors themselves to cultivate or not, as their tastes prompted, there would be a fair prospect of a favourable result.—I have the honor to be, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 10th April 1860.

No. 2095 OF 1860.

REVENUE DEPARTMENT.

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce, Bombay.

SIR,—With reference to Mr. Officiating Chief Secretary Young's letter No. 1352, dated the 19th March 1857, I am directed by His Excellency the Governor in Council to forward herewith, for the information of the Chamber, copy of the communication noted in the margin, on the subject of a proposed Act for the "Better Suppression of Frauds in the Cotton Trade in the Presidency of Bombay."—I have the honor to be, &c.,

From the Legislative Councillor of the Council of India for Bombay, No. 121, dated the 14th May 1860, with accompaniments.

(Signed) B. H. ELLIS,
Secretary to Government.

Bombay Castle, 9th June 1860.

No. 121.

From P. W. LEGEYT, Esq.,
Legislative Councillor of the Council of India, for Bombay,
To H. L. ANDERSON, Esq.,
Acting Chief Secretary to Government, Bombay.

SIR,—With reference to your letter No. 1645, dated the 5th instant, I have the honor to forward, for submission to

the Right Honorable the Governor in Council, the accompanying copy of a minute by me on the "Bill for the Better Suppression of Frauds in the Cotton Trade in the Presidency of Bombay," together with a printed copy of the Report of the Select Committee thereon.—I have the honor to be, &c.,

(Signed) P. W. LEGEYT,
Legislative Councillor.

Fort William, the 14*th May* 1860.

Minute.

The Select Committee on the "Bill for the Better Suppression of Frauds in the Cotton Trade in the Presidency of Bombay" presented their Report to the Council on the 17th March last, of which a copy is herewith forwarded for the information of the Right Honorable the Governor in Council. The Report was adopted by the Council on the 24th idem. I fully believed this had been reported to the Government of Bombay, and regret very much the omission on my part.

The matter was very frequently and very fully discussed by the Select Committee, and the opinion of persons who were in Calcutta, and who had been engaged in the Dharwar and Coompta districts in the purchase of cotton, was taken by the Committee; but, after mature deliberation, the Report above mentioned was resolved upon.

(Signed) P. W. LEGEYT,
Legislative Councillor.

The 14*th May* 1860.

To the Honorable the LEGISLATIVE COUNCIL.

We, the Select Committee on the "Bill for the Better Suppression of Frauds in the Cotton Trade in the Presidency of Bombay," have the honor to submit the following Report:—

We have received some communications from the Government of Bombay on this Bill.

The difficulties of legislating any further on this subject

appear to be fully admitted. It seems very doubtful if the object in view would be attained by passing this Bill, and we do not think it advisable that it should be proceeded with.

(Signed) P. W. LeGeyt.
„ H. Forbes.

The 17th March 1860.

(True copies)
(Signed) B. H. Ellis,
Secretary to Government.

COTTON-CLEANING MACHINERY.

No. 3836 of 1859.

Revenue Department.

To H. Brooke, Esq.,
„ Secretary to the Chamber of Commerce.

Sir,—With reference to my letter No. 3176, dated the 11th ultimo, I am directed by the Right Honorable the Governor in Council to forward, for the information of the Chamber, the accompanying copies of the documents marginally quoted.

Memorandum from the Revenue Commissioner Southern Division, No. 1618, dated the 8th August 1859, with accompaniment.

Para. 1 of Government Resolution No. 3314, dated the 23rd August 1859.

Letter from the Revenue Commissioner Southern Division, No. 1867, dated the 10th September 1859, with accompaniments.

2. I am, at the same time, desired to intimate that this Government has recommended to Her Majesty's Secretary of State for India, that Dr. Forbes be deputed to England for the express purpose of perfecting his mechanical inventions, and consulting with experienced machinists for the improvement of the churka and saw-gin.—I have the honor to be, &c.,

(Signed) B. H. Ellis,
Acting Secretary to Government.

Bombay Castle, 28th September 1859.

No. 79 OF 1859.

To J. D. INVERARITY, Esq.,
Revenue Commissioner Southern Division.

SIR,—I beg to state, that on trial of the new Macarthy gin, recently received, I find that the amount of labour necessary to work it to advantage is considerably in excess of that which is required for the other specimen of this machine which was previously at my disposal, and on the performance of which I had the honor to report in my letter to your address dated 26th ultimo.

2. On attaching the same driving-wheel which was used on the previous occasion just alluded to, it was found that, instead of two, four men were required to work the implement, and the labour was so severe, that even that number could not have continued it for more than three or four hours successively, so that for a day's work two gangs or eight men would be required.

3. The cause of this difference between the two machines is the additional weight which has been added to the iron wheel which moves the leather drum, and this has apparently been done for the purpose of strengthening it for the reception of a handle, by which the machine might be used without having recourse to a driving-wheel; but when worked in this manner, also, I found that, owing to the small diameter of the iron wheel, it was necessary, in order to attain sufficient speed, to turn it at a rate that, with the weight of the gearing attached, no two Natives could continue for even one hour.

4. Cost of labour was one of the objections which I mentioned in my last letter, with reference to the machine first received. In this instance, it is so much increased, that it forms an insuperable obstacle to the adoption of the article by ryots and dealers, and I have no doubt, that were it even furnished to them gratis, it would not in a single instance be put to work.

5. At the same time, I beg to state, that in my opinion the new appliance for cotton-cleaning, which this machine presents, has not had justice done to it, and that, owing to the defective description of motive power which has been applied, its merits cannot be fairly judged of. I am satisfied that, by

a much more simple contrivance, it might be worked at half the cost, yielding double the return,

6. I am not provided with the means of casting the different machinery that would be required to test the correctness of this statement; but, at the same time, am surprised that, at a seat of mechanical invention so famous as Manchester, this evident advantage should have been overlooked.—I have the honor to be, &c.,

(Signed) G. F. FORBES,
Superintendent Cotton Gin Factory.

Dharwar, Cotton Gin Factory, 2nd August 1859.

No. 1618 OF 1859.

TERRITORIAL DEPARTMENT, REVENUE.

Submitted for the information of Government, in continuation of the endorsement from this office No. 1558, dated 30th ultimo.

(Signed) J. D. INVERARITY,
Revenue Commissioner Southern Division.

Poona, Revenue Commissioner's Office, 8th August 1859.

Extract Paragraph 1 *of the Resolution passed by Government, No.* 3314, *dated* 23*rd August* 1859, *on the above papers.* (Communicated to the Revenue Commissioner Southern Division.)

Para. 1. Dr. Forbes may be requested to favour Government with further details regarding the contrivances to which he refers in paragraph 5. His detailed observations may be turned to good account, if communicated to the Manchester Cotton Supply Association.

No. 1867 OF 1859.

REVENUE DEPARTMENT.

From J. D. INVERARITY, Esq.,
Revenue Commissioner Southern Division,

To B. H. ELLIS, Esq.,
Acting Secretary to Government.

SIR,—With reference to the subject of cotton-cleaning machinery, adverted to in the letter to your address, No. 1, dated 7th June 1859, from the Secretary to the Manchester Cotton Supply Association, copy of which was forwarded with Government resolution No. 2926, of 25th July last, and to the desire expressed by Government in paragraph 1 of their resolution No. 3314, dated 23rd ultimo, that Dr. Forbes should favour them with further details regarding the contrivances to which he referred in the 5th paragraph of his report on the result of a trial of the Macarthy gin, I have the honor to submit, for the information of the Right Honorable the Governor in Council, two letters in original from Dr. Forbes, Superintendent Gin Factory, Dharwar, wherein he offers further observations in connection with the saw-gin in use for cleaning Indian grown American cotton, in the Dharwar Collectorate, of which machine he suggested the advisability of obtaining castings from home; and wherein he shows the very great success which has, up to the present time, attended his endeavours to apply mechanical power to the Native churka or roller-gin. It is, I think, probable that Dr. Forbes may take out a patent for his new churka.

1. No. 93, dated the 25th August 1859.
2. No. 98, dated the 6th instant.

2. In a further letter from Dr. Forbes (No. 94, dated 30th August), this officer writes, that from a printed notice he observes that "the maker of the gin lately received here intimates his having subsequently introduced alterations in the moving power of the machine, which, from the description given of them, would have the effect that he alluded to as being practicable in the 5th paragraph of his letter of the 2nd

idem, to which Government (in their resolution No. 3314 of 1859) refer."—I have the honor to be, &c.,

(Signed) J. D. INVERARITY,
Revenue Commissioner Southern Division.

Poona, Revenue Commissioner's Office, 10th Sept. 1859.

No. 93 OF 1859.

To J. D. INVERARITY, Esq.,
Revenue Commissioner Southern Division.

SIR,—I have the honor to acknowledge receipt of your endorsement No. 1539 of 1859, and its accompaniments, as per margin, and I would beg to submit the following observations on the subject of saw-gins, in connection with the present movement for improving cotton-cleaning machinery, as suggested by a perusal of the letter to Government from the Secretary to the Manchester Cotton Supply Association.

Letter from the Secretary to the Manchester Cotton Supply Association, of 7th June 1859, to the Secretary to Government, Bombay.
Printed Copies of Reports on Cotton Gin.

2. The conclusion of the 1st paragraph of the letter referred to states that "the opinion of the Committee is decidedly unfavourable to saw-gins for Indian cotton"; and, from what follows shortly after, I am led to conclude that the term Indian cotton is meant to apply to the short-stapled indigenous varieties; for it is stated that "unless the greatest attention is paid to the working of the saw-gin, it invariably injures the short-stapled Indian cotton by flocking," &c. As my attention in this respect has been solely devoted to the interests of these districts, I am not aware of the extent to which the saw-gin is still made use of elsewhere; but, as far as Dharwar is concerned, I am able to state that for years back there has not been a bale of Native cotton cleaned by the saw-gin throughout the Collectorate.

3. The foremost circumstance which attracted my attention, when first engaged in the duties which I still superintend, was the destruction caused by the saws to the staple of this article. I at once discouraged their use, and since that time the whole of the Native cotton of this

part of the country has been cleaned by the churka and foot-roller.

4. The Cotton Supply Association do not appear to be aware that Dharwar is almost the only province in India into which the cultivation of American cotton has been successfully introduced, and in which it is now rapidly taking the place of the Native variety. If this was known, it would have been understood that the gin sent home from this Factory was intended as a model for iron machinery adapted to cleaning Indian grown *American cotton*, which, like the same article in its native country, can as yet (in so far as I know) be only successfully unseeded by the saw-gin, and that, therefore, the promised machinery on the churka principle (which never can be adapted to this purpose) must fail in providing for the object desired, however useful and advantageous it may prove for the interests of the other varieties—that is for Native or indigenous cotton.

5. For the above reason, and keeping in view the fact which I had lately had occasion to bring to the notice of Government, viz. that the increasing scarcity of timber is rapidly tending to cripple the resources of this Factory, I think it is matter of regret that the Association has declined its aid in assisting to provide the required machinery, and I would most respectfully beg to suggest that some other channel should be had recourse to, otherwise the first and immediate result of the failure of a supply of gins must be the arrest of the steady increase of American cotton cultivation which is now going on here, and its ultimate decrease would as certainly follow.

6. It cannot be expected that the cultivators should provide for themselves in this respect—indeed, it is impossible that they can do so; though I would answer for their paying willingly a fair price for the article they require, such as should entail (if not a profit) at least no loss upon the parties who undertake to supply it. It is not improbable that at some period not very distant, the manufacture of iron machinery may be brought to their doors, but for the present they are helpless, and the success of this important enterprise, on which Government has expended much trouble and expense, must depend upon their wants being met.

7. It is not alone for the reason just mentioned that its failure should be regretted. The wealth and prosperity which it has brought into this part of the country has been well observed by the ryots of the neighbouring provinces, where there is not only a strong desire springing up for its cultivation, but also a field, almost unlimited, open to it. For this fact I can quote unexceptionable authority, in addition to my own experience as regards the applications I receive for gins, and it is one which I think deservedly merits the best attention of the Manchester Association. Supplies of American seed will be of little avail, unless the means of cleaning its produce are also at hand.

8. Having now, I trust, satisfactorily shown that, for the purpose in view, the gin alone is the article required, there being as yet nothing else to replace it, I shall beg leave to offer a few remarks upon the suitability, for the wants of this part of the country, of the model sent home, and also with respect to the printed report of trials with which I have been favoured.

9. I have formerly had occasion to mention a conclusion, which further experience only confirms, viz. that a gin must be both adapted and adjusted to the description of cotton upon which it is intended to operate, and a very trifling difference in the material will show itself in the performance of the machine.

10. You are well aware that gins of the most approved model were brought here from America; no expense was spared. It will not be doubted that they were the very best procurable, and that, before being sent away, they were tested, and found to answer well upon American grown cotton. In workmanship they are faultless; and it must be apparent that some other reason must be sought to account for their failure here. There are several still in the Factory. I have studied them carefully, and I can show that the reason is the climate difference which exists between the produce of the two countries, more especially as regards the size and plumpness of the seeds. I have both at my disposal for contrast.

11. I have for some time back endeavoured to show that the home complaints against Indian grown New Orleans cotton arose less from the effects of the saw than from adulteration,—that is, from its mixed cultivation with the Native

variety, which will not stand the saw-gin; and to settle this question I have been able, through the kind co-operation of the Bombay Chamber of Commerce, to forward ten bales of the unadulterated article for the opinion of the home spinners. The only difference between this supply and the usual produce (with exception of part of it being from new seed) is that the Native variety was picked from amongst it. In other respects it had no advantage. It was cleaned in the districts. Other duties prevented my being present at the time; but samples of the seed and cotton were sent to me, from which I formed my opinion, and I was glad afterwards to find that it was upheld by that of the Bombay Chamber of Commerce. If I recollect rightly, the cotton was valued at one half-penny per pound above the usual produce.

12. The quality of ginning will of course be pronounced upon by the spinners; and it is to this test that I may be fairly allowed to appeal, and by which I will willingly abide. The performance of the gin at home is comparatively a very immaterial affair; for, if my explanation is correct with regard to the cause which led to the failure of the American gins here, the same must apply to the Indian gin elsewhere: both were equally operating upon material for which they were not suited.

13. What I hope may be decided upon,—and it is a point of the utmost importance as regards the future prospects of Indian grown American cotton,—is the comparative freedom from injury by the saw, as contrasted with the usual produce received from the States (keeping in view, of course, the difference of quality between the articles); and supposing this to be satisfactorily settled, which I trust will be the case, there are still one or two points which require notice in submitting the machine as a model for this country.

14. The first of these is the extent of its performance, or its economy in labour. The printed report enables me to place this in comparison with that of the Jameson's gin, recommended as the best; and, in doing so, I may state that I am not giving the quantity as the performance of a gin got up for trial—it is taken from the average returns of a register scrupulously kept, and into which is entered the outturn of every machine that leaves the Factory. This reckoning may therefore be accepted as a fair estimate of the

performance of the gins in the hands of the ryots throughout the districts.

15. It might very easily be exceeded by a simple acceleration of speed; but, if the conclusions to which my experiments have led me are correct, there is a certain limit to which the performance of a saw should be restricted, and beyond which it will only continue to inflict increasing injury to the staple,—the lower the speed, the less risk there is of injury; over a certain velocity, it becomes violence, and the fibre will be damaged whenever it is touched. Supposing the gin to be properly adjusted, the point of speed to stop at is just where the seed is fairly cleaned: different varieties, such as smooth, and fibrous, as well as different diameters of saw, will of course require varied velocity; but for the American produce of this country I find that 240 revolutions of a 10-inch saw is about the proper rate.

16. The next point to notice is the durability of the gin; and this will be best shown by an extract from the records of the office. The new gins were first introduced in 1855, and the returns show, that out of 432 which have since then been sold to the ryots, only 43 have required repair of any description; the others continue at work in good order, and, as far as wood may be trusted to in this country, the majority are likely to do so for some time. I may mention, that formerly it was rare that a gin continued at work for two months without requiring to be brought in for repairs.

17. I was surprised to observe that the Indian gin did not find a place at the home competition; but, from what I have explained, it will be seen that the omission was of little importance, as no seed cotton had been sent with it. In conclusion, however, I would beg to state, that, fully appreciating the superior advantages and efficiency of Manchester mechanists, I am far from asserting for it any mechanical superiority over even the humblest machine put forward. Its durability has been fairly tested; it takes a superior place as regards outturn of work; the quality of its performance has been confidently submitted for the opinion of the best possible judges; and all I have to claim for the gin is, that, after long and painstaking observation, I have adjusted it accurately and carefully to the purpose for which it is wanted, and even this much would, I have no doubt, have been equalled by home competitors had the opportunities that

I have enjoyed been at their disposal.—I have the honor to be, &c.,

(Signed) G. F. FORBES,
Superintendent Cotton Gin Factory.

Dharwar, Cotton Gin Factory, 25th August 1859.

Comparative Trial of Dharwar Gin.

Maker.	Width.	Weight of Cotton cleaned.	Duration of Experiment	Weight of Cotton cleaned per Machine in ten hours	Description of Seed, &.
	Inches.	lb.	Minutes.	lb.	
Jameson	10·5	1·88	6	188·0	Smooth.
Dharwar	9·6	2·0	6	200·0	Fibrous.

No. 98 OF 1859.

To J. D. INVERARITY, Esq.,
Revenue Commissioner Southern Division.

SIR,—I have the honor to acknowledge receipt of your memorandum No. 1777 of 1859, and beg herewith to return the documents therein called for, of which I have retained copies.

2. The weather has hitherto been so continuously wet that any cotton-cleaning operations have not been practicable; and I have accordingly as yet been unable to put the new churka into regular work.

2. I may, however, mention, that in such trials of it as have been made, its performances, both as regards quantity and quality, have more than realised my anticipations. The outturn of work exceeds that of any other machine that has as yet appeared.

4. In the accompanying returns (No. 3) you will find that the largest performance is accorded to the Macarthy gin, with the new mechanical appliances for increasing its speed; and I have therefore selected that for comparison. The same amount of labour was employed, viz. two men and one feeder.

Description of Gin, and how worked.	Maker.	Weight of Cotton cleaned.	Duration of Experiment.	Estimated Power.	Weight of Clean Cotton produced in Ten Hours.	The kind and quality of Work performed.			Condition of Seed.	Maker's Price.
						Seed.	Staple.	Cleanness.		
		lb.	Minutes.	Men.	lb.					
Roller-gin, worked by hand..	Dunlop; 1st Trial..	1.25	10	2	75.0	Fibrous.	Uninjured.	Clean.	Whole	10.0
	Dunlop; 2nd Trial..	1.625	10	2	97.5	Smooth.	Uninjured.	Clean.	Some broken	10.0
Power churka.....	Dharwar.....	2.50	10	2	150.0 *	Fibrous.	Uninjured.	Clean.	Whole	8.10

* The actual average outturn was at the rate of 184lb. of clean cotton per day of 10 hours, but as the amount shown in a trial cannot (for several reasons) be considered a fair estimate of what may be expected in continuous employment, I have thought it right to leave an ample margin, and have put down 150lb., which would be a fair and easy day's work for two men.—G. F. F.

5. This shows a difference in favour of the churka of one-third as regards performance; and if American cotton was made use of at home (which probably was the case), it would be still greater, as the same amount of Native kuppas would have yielded about one-third less of clean cotton, the proportion being on American cotton three parts seed to one of staple, whereas our Native cotton has four parts seed to one of fibre; and in the given time the machine would only clean the same weight of seed cotton of either variety. The principle of this machine is identical with that of the common churka, which is a sufficient guarantee for its safety, as regards the staple, and the seed is both uninjured and most perfectly cleaned by it. I am now desirous of keeping it constantly at work for some time with Natives, to test its suitability for their hands; for though the mechanism is extremely simple, it will be well to ascertain whether there is anything about it that they can possibly put out of order, and, if so, to introduce the necessary alterations. This was required with the saw-gins, and expedients found wanting which would not have been necessary with any other class of labourers.—I have the honor to be, &c.,

(Signed) G. F. FORBES,
Superintendent Cotton Gin Factory.

Dharwar, Cotton Gin Factory, 6th September 1859.

(True copies)
(Signed) B. H. ELLIS,
Acting Secretary to Government.

No. 114 of 1859.

To B. H. ELLIS, Esq.,
Acting Secretary to Government, Bombay.

SIR,—By direction of the Committee of the Chamber of Commerce, I have the honor to acknowledge your letters No. 3836 of 1859, dated 28th September, referring to experiments with the Macarthy saw-gin, and No. 4007 of 1859, dated 12th October, recapitulating the result of the various experiments in irrigating cotton.

Both these papers have been read with much interest by the Chamber; but as the conclusions arrived at are the same as those previously formed by the Committee, the statements do not call for any particular remark or discussion.

They beg, however, to express their thanks to the Right Honorable the Governor in Council for the interest taken in these important subjects, and for the readiness shown to promote the improvement of the staple.

They trust that Dr. Forbes' mission to England may be productive of an improvement in the machine for ginning cotton, and his long experience in these matters lead them to expect a favourable result.—I have the honor to be, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 13th October 1859.

No. 4229 OF 1859.

REVENUE DEPARTMENT.

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce.

SIR,—I am directed by the Right Honorable the Governor in Council to forward to you, for the information of the Chamber, copies of the documents marginally quoted, together with the samples of cotton referred to in paragraph 27 of Dr. Forbes' report.—I have the honor to be, &c.,

Letter (with accompaniments) from the Superintendent Cotton Gin Factory, Dharwar, No. 106, dated the 16th September 1859, to the address of the Collector.

Government resolution of this date, No. 4228, communicated to the Revenue Commissioner Southern Division.

(Signed) R. H. ELLIS,
Acting Secretary to Government.

Bombay Castle, 24th October 1859.

No. 106 OF 1859.

To T. OGILVY, Esq.,
Collector of Dharwar.

SIR,—I have the honor to forward the Report of the Cotton Gin Factory for the half-year ending 31st May 1859. My absence from Dharwar, as well as the circumstance of my having been much longer than usual in receiving the returns of the Native district authorities, have been the causes of the delay which has occurred in its transmission.

2. The following is a summary of the work performed during the period in question, as exhibited by the accompanying returns:—

Value of the work done to 30 gins of 18 saws each, completed.....Rs.				5,098	0 0
Do. of do. to 25 do. of 10 do..				2,746	0 0
Do. of work done in altering 11 gins of 8 saws each, to the present model.....				22	0 0
Do. of work done to 5 gins of 8 saws each, being altered to do.....				187	0 0
Do. of repairs done to old gins.....				273	6 6
Do. of tools made for the use of the Factory				7	2 0
Cost of a model pile-engine				35	0 0
Cost of experiments				176	0 0
			Rs.	8,544	8 6
The value of materials consumed amounts to.....Rs.	3,083	10 6			
And cost of wages to artisans and workmen.....	4,063	8 5			
			Rs.	7,147	2 11
Deducted from the above sum, leaves a balance to the credit of Government on the six months' operations of.....Rs.				1,397	5 7

3. Sixty-three new gins have been sold during the above period, and their value, amounting to Rs. 8,660, has all been recovered. Of this, thirty were of eighteen saws each, twenty-six of ten saws, and seven of eight saws. In addi-

tion to these, twelve gins were ordered for Scinde, which are now being prepared.

4. Contrasted with the previous half-year, the item for district repairs of gins is less by the sum of Rs. 785, to account for which, I may mention that the repairing department finds its occupation chiefly in the alteration of the old description of gins formerly in use to the new mode of construction, and that there are but few of these now remaining that have not been so dealt with. The new gins have not yet begun to require repairs. At the same time, a considerable proportion of this description of work was postponed pending the opening of the new Branch Repairing Factory at Kunijghy, which took place in my last, and since that time its workmen have been actively occupied.

5. During the greater part of the period embraced by this report, I was elsewhere engaged on other duties, and the executive supervision of the Factory was conducted by my Mechanical Superintendent, Mr. Charles Compalais, in a manner with which I had reason to be well satisfied. Had he been so authorised, a larger return of work could have been produced; but keeping in view the wishes of Government, as noticed in the 3rd paragraph of my letter to your address dated 27th January last, I considered it necessary to restrict him as far as possible in the construction of new machinery.

6. Since my return, I have been obliged to curtail operations still further, partly on account of being short of the suitable description of saws required, but also chiefly owing to a deficiency of properly seasoned timber, the stock of which is now nearly expended. What will afterwards be available is comparatively green wood, having been cut only last year, and it will be desirable to make but as few gins as possible from it, until it becomes more fit for use. For this reason, I have found it necessary to dispense with a large proportion of the contingent establishment, and to diminish the number of new gins made monthly to one-half of the former amount.

7. I believe it is now understood that the increasing difficulty as regards timber will render it necessary ere long to have recourse to iron machinery from home; and, in connection with this subject, I was not quite certain whether the promise made by the Cotton Supply Association in their

letter to Government dated 19th August last, to provide some new description of machine, was intended to apply to the roller-churka, or whether it pointed to the Macarthy gin; but as the former principle will not be found to succeed with American cotton, the choice at present rests between the latter and the saw-gin, and it therefore becomes a matter of some interest to consider and contrast the respective merits of the two.

8. In doing so, however, the remarks cannot apply to the Macarthy gin recently received here, which, on account of the slowness of its performance, and the force required to work it, is quite unsuited for manual labour, though, from the circumstance of handles having been attached, it appears to have been intended for that purpose. The very utmost return that I could obtain from it was at the rate of 6lb. of clean cotton per hour, and there are certainly not two coolies in Dharwar who could continue the exertion for two hours successively. But mechanical alterations have been advertised, which are said to have increased the performance of the machine, and rendered it more suitable for hand labour.

9. The points most essential in an implement intended for the use of Natives are—1*st*, safety to the cotton staple in work; 2*nd*, economy in labour; 3*rd*, durability and disliability to get out of order; and 4*th*, cheapness.

10. As regards the former, I have before now had occasion to represent, that I believed the complaints hitherto made of American cotton arose more from adulteration and admixture with the Native variety than from any injury in ginning, and the measures that have been adopted for determining this point have as yet tended to confirm the opinion. The Dharwar American cotton, of a pure description, which recently reached Bombay, was well spoken of, and accorded a higher market value than usual. The same was not only the case with a sample sent home for the opinion of the Cotton Supply Association, but, in their letter to Government dated 10th December 1858, it was mentioned as "a highly desirable cotton in all respects," which could hardly have been said of it if it had been materially injured by the saw-gin; and a further and more conclusive decision may shortly be expected from the supply (consisting of sixteen bales) which was recently sent home to the spinners of Manchester.

11. If adulteration is the cause, it is quite clear that no other description of machine would remove this evil, and that it can only be remedied through the cultivators. I have not observed that complaint is made of the saw-gin in cotton which is received from America; and if the same description of article can be equally well cleaned here, I think we cannot be far wrong in waiting until some other invention is had recourse to in that country, where cotton interests are so permanent.

12. On the second head, viz. economy in work, until other than Native enterprise becomes engaged, it is useless to speculate upon steam or any application of power beyond hand labour; and, as before mentioned, the Macarthy gins hitherto received have been so ill adapted to this purpose, that no comparison can be drawn between them and the saw-gin; but accepting the outturn, which is stated to be the result of a new application of mechanical power, viz. 97lb. of clean cotton in ten hours, with the labour of two men and one feeder, the same expense of hire with a 10-saw gin will yield 150lb. of clean cotton in a similar period. To produce this, the work is also sufficiently light to admit of two men continuing it with ease throughout the day, and Natives will demur at being told to give up this advantage, unless they can be shown some very substantial equivalent.

13. There is another point which deserves notice, and that is the speed at which cleaning machinery may be driven without risk of injury to the cotton. With the saw-gin I have ascertained, beyond doubt, that undue velocity is not only prejudicial, but that it also does not yield the additional outturn that might be expected; and I have accordingly long since reduced the rate to the lowest point consistent with efficient cleaning of the seed, viz. to 240 revolutions per minute. This is less than is adopted in America, but it may probably be accounted for by a climate difference in the produce of the two countries. To obtain full results, I observe that the Macarthy gin must be worked at upwards of 600 revolutions, and it may be questioned whether Indian fibre will safely stand the touch of machinery driven at that speed.

14. The third point is the most important of all, viz. durability, and security against being put out of order. In this respect, the saw-gin cannot now be found fault with.

It is so perfectly protected that the coolies cannot interfere with it without immediate detection, nor, indeed, can they do so at all, unless they have certain tools by them to open it out, which is not generally the case; and the consequence is, that the machines have now been at work for years without requiring either repair or adjustment.

15. Taking the Macarthy machine as it is at present, I must say, without prejudice, that I do not believe it would be found in order in a single instance after being a week in the hands of Natives. The relative position of the blades is adjusted by screws, interference with which would, on the one hand have the effect of drawing the former apart, so as to throw the machine out of work, and, on the other, of bringing them too closely into contact, which (as I have seen) would prove utterly destructive to the staple, though, so long as the machine turned out cotton of any description, the circumstance would receive no attention from the coolies, who are paid by the day, nor probably even from the owner, if he were present.

16. As regards price, the Macarthy machine is most costly; but this difference would not be any material objection if the article was otherwise suitable.

17. In the above contrast I have, as far as my experience can guide me, given fair consideration to this important point, which it is most desirable should be determined with as little delay as possible, in order that measures may be taken to meet the demand for machinery in these districts before the present resource fails, as otherwise the first result will be a check to the cultivation of American cotton, which has of late been steadily increasing.

18. I regret very much having to report that I fear the American seed lately received will prove a failure. There were forty-two bags of it, containing upwards of 40 cwt., all of which was eagerly taken up by the ryots, and their disappointment will be great if the account I have this day received proves to be correct. A great portion was sown about a fortnight ago, and, though the weather has been most propitious, no plants have as yet appeared. The same, I am told, is the case with the seed forwarded to you.

19. I have despatched a trustworthy person to the Bunkapore Talooka to make further inquiries, and shall report the result. In order that there may be no doubt about it,

I have directed him to dig up and bring me a portion of the seed. It appeared to be sound on its arrival here, but it may have suffered from heating on board ship, though there was nothing observable to indicate such an occurrence, nor was it worm-eaten, which is the usual defect.

20. This, if it turns out to be correct, will be the second failure in an extensive consignment of seed. On future occasions, I would recommend that the cotton should be sent out uncleaned, and that it should not be unseeded until the sowing period arrives. There would be additional security if it could be stowed in an unconfined situation on board ship.

21. In conformity with the instructions conveyed in Government resolution No. 3645, of 30th October 1858, early cultivation of indigenous cotton has been again tried this season. On the 1st of May last, half an acre was sown in Dharwar, and an equal amount at Hooblee, and the same was repeated on the 15th of that month. The experiment on this occasion has proved entirely unsuccessful. The cause is doubtless to be attributed to a continuation of dry weather, which prevailed at the time of sowing. At Hooblee, no rain fell, and the consequence was that hardly a single plant appeared. In Dharwar, there were some showers, and about 60 per cent. came up, but upwards of half of these were subsequently withered by the dry east winds. The remainder continued in a stunted and sickly condition until the end of June last, when a fall of rain refreshed them. By the middle of August last, they had attained a height of nine inches, and since then they have continued to grow well, but they are still, in size, far short of last year's plants of the same age, and the pruning which I thought would have been advantagous to the latter does not appear to be necessary nor even admissible with these.

22. The drought was general at that time, and had the whole cotton land of the country been sown, the same result would have ensued. Under such uncertainty as regards the requisite amount of moisture, it is needless to hope that the cultivators could be induced to alter their present season; and if the system is to be pursued, or the experiment tried again, I would recommend its being done under irrigation only.

23. The Commissioner of Lingasoogoor has been kind

enough to send me specimens of the cotton produce of the Assigned Districts. There are three varieties: the first is the indigenous cotton, which I applied for to ascertain its suitability to the new power churka, and I am glad to find that it can be cleaned by the machine equally well with the Dharwar Native cotton. The second is a specimen of New Orleans cotton, which I wished to contrast with the produce of these districts. The third sample is marked Egyptian, but if it is so, it is difficult to recognise it, and it seems a very poor article.

24. With regard to the specimen of this variety which was sent me by Mr. Brooke, and upon which I have not hitherto reported, reared as it was, it can only be considered as a garden sample. I saw the cultivation of it, which was very different from unsheltered exposure upon the black plain, where it can hitherto scarcely be said to have succeeded in a single instance. Its open cultivation was tried also last year at Bettigerry by the Missionaries, but without any good result. In Mr. Brooke's experiment, the size and strength that the plants had attained was noticed as remarkable.

25. I have now in the Factory compound a piece of land in cultivation, in which there are plots of every variety of cotton that has hitherto been tried in these districts. They are all at present in full bearing of a second year's crop, and afford an opportunity of observing the difference produced by shelter alone (for they have not been watered). The tallest and most luxuriant is the Factory cotton, much of which is over seven feet high, though the soil is comparatively poor. The next in height is the Egyptian, which has attained a growth of six feet. Native cotton is five and a half feet high, and fully double the bulk that it attains on the plain.

26. The object I have had in view in this experiment is to ascertain, if possible, what hybridous effects occur from contiguous cultivation. Next sowing from the present seed ought to show results, but I do not believe that there is much affinity, in this respect, between the Native and the New Orleans, and I strongly suspect that the deterioration which has been noticed and spoken of at home, as arising from this cause, has been solely owing to adulteration, from mixed cultivation and picking of the two varieties.

27. From a close comparison with the produce of newly imported seed which was sown last season, I was unable to observe that the old cotton had in the slightest degree lost any of its characteristic distinctions. For the benefit of those who may wish to judge for themselves, I have the pleasure to forward samples (sent by banghy), of the produce of the old and new seed taken from adjoining fields. The former, from the number of years it has been in the country, may now be considered as naturalised, and it will be seen that, so far from having degenerated, it has rather the advantage of the other. I have also enclosed a specimen of the New Orleans cotton from the Assigned Districts. The fibre is shorter than that of the Dharwar produce; but I have seen a better sample than this, which is from second picking, the first being usually the best.—I have the honor to be, &c.,

(Signed) G. F. FORBES,
Superintendent Cotton Gin Factory.

Dharwar, Cotton Gin Factory, 16th Sept. 1859.

STATEMENT No. 1.

COTTON PLANTERS' REPORT FOR THE HALF-YEAR COMMENCING 1ST DECEMBER 1858, AND ENDING 31ST MAY 1859, IN THE DHARWAR COLLECTORATE.

STATEMENT

Cotton Planters' Report for the Half-Year commencing 1st December

TALOOKAS.	Prospect of the Season, and State of the Crop as regards each sort of Cotton; showing, also, what Stations were visited by the Superintendent.	EXTENT IN ACRES.								For Sale in the Factory.	In Use.	
		New Orleans.		Broach.		Total Foreign.		Country Cotton.		Belonging to Government.	Belonging to Private Individuals.	
		Extent in Acres.	Estimated Produce in Candies of 784lb.	Extent in Acres.	Estimated Produce in Candies of 784lb.	Extent in Acres.	Estimated Produce in Candies of 784lb.	Extent in Acres.	Estimated Produce in Candies of 784lb.	Number and Size of Gins.	Number and Size of Gins.	Talookas.
1	2	3	4	5	6	7	8	9	10	11	12	13
		A. ch.	Cds. lb.	A. ch.	Cds. lb.	A. ch.	Cds. lb.	A. ch.	Cds. lb.			
Dharwar	Season was favourable, and anticipations about the yield of the crop were nearly realised.	156 0	35 640	....	....	156 0	35 640	13,132 3	4,020 18	3 Gins of 20 Saws.	6 Gins of 40 Saws.	Unable to state, as the gins are constantly removed about from one Talooka to another, and often into the adjacent Madras districts and Inam villages, according to the requirements of the owner.
Nowlgoond		8,894 16	2,042 64	22 8	5 76	8,916 24	2,047 140	69,517 5	21,280 590	20 do. of 18 do.	2 do. of 25 do.	
Dumbul		24,746 10	5,681 421	51 32	11 700	24,798 2	5,693 337	68,305 18	20,209 562	15 do. of 10 do.	1 do. of 24 do.	
Bunkapore		35,530 1	8,157 316½	82 27	18 779½	35,612 28	8,176 302	13,805 39	4,226 250	4 do. of 8 do.	13 do. of 20 do.	
Hangul		5,304 27	1,217 713½	1 28	0 306	5,306 15	1,218 235½	8,895 25	2,723 118	2 do. of 4 do.	1 do. of 19 do.	
Hoobleе		7,250 27	1,664 545½	61 29	14 134½	7,312 16	1,678 680	13,245 39	4,054 698	2 Roller-gins.	232 do. of 18 do.	
Raneebednore		17,016 27	3,906 697½	38 28	8 694	17,055 15	3,915 607½	16,213 38	4,963 356	1 Egyptian churka.	1 do. of 15 do.	
Kode		2,590 14	594 567	2 17	0 436½	2,592 31	595 219½	9,254 12	2,832 744	1 Cotton thrasher.	8 do. of 14 do.	
Savanoor Jageer		3,655 31	839 263½	....	....	3,655 31	839 263½	1,286 11	393 594		3 do. of 13 do.	
Heblee Jageer		....	....	....	....	....	....	1,337 0	409 224		192 do. of 10 do.	
											71 do. of 8 do.	
											144 do. of 7 do.	
		105,144 33	24,140 308½	261 9	59 764½	105,406 2	24,200 289	214,993 30	65,814 304	48	674	

Dharwar, Cotton Gin Factory, 16th September 1859.

No. 1.

1858, *and ending* 31*st May* 1859, *in the Dharwar Collectorate.*

GINS.										
Out of Use.		Completed in the present Half-year.		Being made.			Sold for Government during the Half-year under report.		Profit or Loss to Government, deducting the Cost of European Superintendence.	Total Net Expenses on account of Experiment from the commencement to the close of the Half-year preceding that under report.	Total Expenses for the Half-year under report.	REMARKS.
Belonging to Private Individuals.		Belonging to Government.		For Government	For Private Individuals.							
Number and size of Gins.	Talookas.	Number and Size of Gins.	Value.	Number and Size of Gins.	Number sold.	Size of Gins.	Number and Size of Gins.	At what Cost.				
14	15	16	17	18	19	20	21	22	23	24	25	26
None that I am aware of.		31 Gins of 18 Saws.	Rs. 5,270	12 Gins of 8 Saws.	None.	..	30 Gins of 18 Saws.	Rs. a. p. 5,100 0 0	Net profit during the six months under report, Rs. 1,397-5-7, as shown in the accompanying Abstract Statement of Cost and Return.	Total expenses .....Rs. 6,25,470 12 5 Total receipts ..... „ 2,02,942 2 3 Balance....Rs. 4,22,528 10 2	Total receipts.....Rs. 8,106 14 6 Total expenses..... „ 5,814 13 9 Balance....Rs. 2,292 0 9	Note.—The figures, though given under the head "Broach," are actually for Egyptian cotton. No Broach cotton is cultivated in this Zillah.
		25 Gins of 10 do.	2,750	1 Cotton-cleaning machine.			26 do. of 10 do.	2,860 0 0				
		11 do. of 8 do.	1,100	26 Roller-churkas.			7 do. of 8 do.	700 0 0				
								Rs. 8,660 0 0				
							Add—					
							Value of Repairs to saw-gins	273 6 6				
		67 .. ..Rupees	9,120	39			63 .. .. ..Rs.	8,933 6 6				

(Signed) G. F. Forbes,
Superintendent Cotton Gin Factory.

STATEMENT No. 2.

Account of Receipts and Expenditure of the Cotton Experiments, Dharwar Collectorate, from the commencement up to 31st May 1859.

				Rs.	a.	p.
Amount of receipts from the commencement up to the half-year preceding that under report				2,02,942	2	3
For the Half-year under Report. *From 1st December 1858 to 31st May 1859.*						
By proceeds of the sale of saw-gins, viz.—						
December 1858	Rs.	920	0 0			
January 1859		745	0 0			
February „		1,025	0 0			
March „		2,020	0 0			
April „		970	0 0			
May „		808	0 0			
			6,488	0 0		
Proceeds of the repair of saw-gins, viz.—						
December 1858	Rs.	41	4 0			
January 1859		402	13 10			
February „		264	3 4			
March „		193	12 11			
April „		122	12 7			
May „		281	12 0			
			1,306	10 8		
Deposits for gins to be disposed of,—						
January 1859	Rs.	10	0 0			
April „		6	0 0			
May „		24	0 0			
			40	0 0		
Value of a pile-driving machine			259	5 10		
Amount recovered for advances made for carriage of saw-gins, &c.			12	14 0		
				8,106	14	6
			Rs.	2,11,049	0	9
Balance against the Experiment				4,20,236	9	5
			Rupees	6,31,285	10	2

				Rs.	a.	p.
Amount of expenses from the commencement up to the half-year preceding that under report				6,25,470	12	5
For the Half-year under Report. *From 1st December 1858 to 31st May 1859.*						
Allowance to Dr. G. F. Forbes, Superintendent Cotton Gin Factory, from 1st Nov. 1858 to 30th April 1859, at Rs. 200 per month	Rs.	1,200	0 0			
Salary of the establishment of the Cotton Gin Factory, from 1st Nov. 1858 to 30th April 1859		1,732	14 11			
			2,932	14 11		
Batta to the establishment, passed audit for the months of October and November 1858, and January and February 1859	Rs.	10	9 6			
Sundry expenses for constructing saw-gins, as per bills audited for the following months, viz.—						
October 1858 „	Rs.	912	7 7			
November „		569	2 1			
December „		502	0 5			
February 1859		478	10 2			
			2,462	4 3		
Value of 200 gin-saws, as per bill No. 74, of 30th April 1858, from the Collector of Bombay	Rs.	409	1 1			
				5,814	13	9
			Rupees	6,31,285	10	2

Dharwar, Cotton Gin Factory, 16th September 1859.

(Signed) G. F. Forbes,
Superintendent Cotton Gin Factory.

STATEMENT No. 3.

Detailed Memorandum of Sums Collected during each of the Six Months embraced in the Cotton Planters' Report for the Half-year commencing 1st December 1858, and ending 31st May 1859, for Gins sold, and Value of Repairs to Gins during that period; also for Repairs to Gins and Gins sold during the previous Half-year.

Months.	Sums collected during the present Half-year for Gins sold prior to 1st December 1858.	Sums collected for Gins sold during the Half-year under report.	Sums collected during the present Half-year for Repairs made prior to 1st Dec. 1858.	Sums collected for Gins Repaired during the Half-year under report.	Total.	Remarks.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
December 1858..	700 0 0	220 0 0	3 12 0	37 8 0	961 4 0	Amount collected for sale and repair of saw-gins in the six months under report.....Rs. 7,794 10 8
January 1859 ..	200 0 0	545 0 0	395 5 10	7 8 0	1,147 13 10	Advances deposited for gins to be disposed of 40 0 0
February „ ..	....	1,025 0 0	252 15 4	11 4 0	1,289 3 4	Value of a pile-driving machine. 259 5 10
March „ ..	....	2,020 0 0	153 3 11	40 9 0	2,213 12 11	Advances made for carriage of saw-gins, &c., recovered 12 14 0
April „ ..	....	970 0 0	44 14 7	77 14 0	1,092 12 7	
May „ ..	....	808 0 0	278 0 0	3 12 0	1,089 12 0	
Total....Rs.	900 0 0	5,588 0 0	1,128 3 8	178 7 0	7,794 10 8	Rs. 8,106 14 6

Dharwar, Cotton Gin Factory, 16th September 1859.

(Signed) G. F. Forbes,
Superintendent Cotton Gin Factory.

STATEMENT

Dr. *Abstract Statement showing the Cost and Return of the Cotton Gin*

				Rs.	a.	p.
By value of 28 gins of 18 saws completed in the present half-year .. .. Rs.	4,760	0	0			
Difference of value of 2 gins of 18 saws in which work for Rs. 2 was done to the close of the last half-year, and which since completed	338	0	0			
Value of 23 gins of 10 saws completed in the present half-year	2,530	0	0			
Difference of value of 2 gins of 10 saws, in which work for Rs. 4 was done to the close of last half-year, and which since completed	216	0	0			
Value of alterations to 11 gins of 8 saws, completed ..	22	0	0			
Do. of work towards completing 5 gins of 8 saws being altered	187	0	0			
				8,053	0	0
Value of repairs to saw-gins..				273	6	6
Experiments				176	0	0
Cost of a model pile-engine				35	0	0
Cost of Dead Stock Articles made for the use of the Factory, viz.—						
8 Turn chisels .. .. Rs.	3	0	0			
8 Carpenters' chisels	3	8	0			
1 Drill or bit for trace	0	10	0			
				7	2	0
Total..... Rs.				8,544	8	6

Dharwar, Cotton Gin Factory, 16th September 1859.

No. 4.

Factory, Dharwar Collectorate, from 1st Dec. 1858 to 31st May 1859. **Cr.**

				Rs. a. p.
To Cost of Establishment :—				
Salary of the fixed establishment, exclusive of the European Superintendents and an Apprentice	1,503 15 4			
Batta to ditto, exclusive of that of do. and do..	2 1 0			
Wages to the contingent establishment ..	2,557 8 1			
Cost of Materials :—		4,063	8 5	
81 mds. 12 lbs. 10 oz. of square iron of sizes, at Rs. 1-14-0 and upwards per md. of 28lb .. .. Rs.	152 1 0			
94 „ 23 „ 8 „ of round do., at Rupees 1-14-0 do. do.	177 10 0			
33 „ 21 „ 10 „ of sheet do., at Rs. 3-2-0 do. do.	105 3 5			
52 „ 9 „ 6 „ of flat do., at Rs. 1-13-0 do. do.	95 1 11			
3 „ 19 „ 9 „ of steel from old files, at Rs. 3-8-0 do. do.	12 14 3			
26 „ 21 „ 6 „ of barrel iron, at Rupees 0-11-0 do. do.	87 2 1			
45 „ 16 „ 11 „ of zinc, at Rs. 4-11-0 do. do.	223 9 7			
13 „ 3 „ 0 „ of old brass, at Rs. 14-0-0 do. do.	183 8 0			
98 gross 10 dozens and 11 screws of sizes, at different rates	82 4 5			
Wear and tear of files	121 6 0			
812 circular saws of 10 inches, at Rs. 1-2-4 each..	930 6 8			
2 do. of 12 do. at Rs. 2 do. ..	4 0 0			
40½ buffaloe hides, weighing 28 mds. 24¾ lb., at Rs. 4-4-0 and upwards per md. of 28 lb.	122 11 4			
1 bullock do., weighing 14lb., at Rs. 4-6-0 per maund of 28lb	2 3 0			
674 puras of charcoal, at puras 12 per rupee ..	56 2 8			
105 honny logs, measuring 1,724 cubic feet ½ in., at as. 4 per foot and nine	430 14 2			
3 teak do. 114 do. 10½ in., at as. 8 per do. do.	57 6 9			
14 babool blocks, at as. 12 each	10 8 0			
25lb. of bristles, at Rs. 2 per lb..	50 0 0			
Cost of Sundry Expenses :—		2,905	1 3	
December 1858 .. ..Rs.	18 9 5			
January 1859	17 8 0			
February „	20 10 7			
March „	51 0 2			
April „	30 1 3			
May „	40 11 10			
		178	9 3	
				7,147 2 11
Profit to Government for the half-year				1,397 5 7
			Total.....Rs.	8,544 8 6

(Signed) G. F. FORBES,
Superintendent Cotton Gin Factory.

STATEMENT No. 5.

Detailed Memorandum of the Number, Size, and Value of Gins made and sold during the Half-year ending 31st May 1859, and the Balance of Cotton Machines in Store.

	Machines.																	
	Gins of 20 Saws.		Gins of 18 Saws.			Gins of 10 Saws.			Gins of 8 Saws.			Gins of 4 Saws.		Cotton Thrashers.		Egyptian Churkas.		Roller Gins.	
	Number.	Value.	Number.	Value.	Value recovered.	Number.	Value.	Value recovered.	Number.	Value.	Value recovered.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
Number which were on hand at the close of the last half-year.. ..	3	..	19	..	..	16	..	..	..	..	..	2	..	1	..	1	..	2	..
Ditto completed during the present half-year..	..	..	31	..	..	25	..	..	11	..	..	..	..	..	..	..	..	..	..
Total..	3	..	50	..	..	41	..	..	11	..	..	2	..	1	..	1	..	2	..
Deduct— Number sold in the present half-year.. ..	..	..	30	5,100	3,320	26	2,860	1,750	7	700	518	..	..	..	..	..	..	..	..
Balance of cotton machines on hand, except those being made ..	3	..	20	..	..	15	..	..	4	..	..	2	..	1	..	1	..	2	..

Dharwar, Cotton Gin Factory, 16th September 1859.

(Signed) G. F. FORBES,
Superintendent Cotton Gin Factory.

STATEMENT No. 6.

Statement of Gins Sold during the Half-Year ending 31st May 1859.

Months.	Description of Gins.						Total.		Remarks.
	Of Saws 18 each.		Of Saws 10 each.		Of Saws 8 each.				
	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.	
		Rs.		Rs.		Rs.		Rs.	
December 1858...	2	340	3	330	..	....	5	670	
January 1859...	4	680	6	660	..	....	10	1,340	
February „ ...	14	2,380	6	660	..	....	20	3,040	
March „ ...	2	340	4	440	3	300	9	1,080	
April „ ...	2	340	4	440	2	200	8	980	
May „ ...	6	1,020	3	330	2	200	11	1,550	
Total..	30	5,100	26	2,860	7	700	63	8,660	

(Signed) G. F. Forbes,
Superintendent Cotton Gin Factory.

Dharwar, Cotton Gin Factory, 16th September 1859.

No. 4228 of 1859.

Revenue Department.

Copy of the Resolution passed by Government on a letter from the Revenue Commissioner Southern Division, No. 2068, *dated the 7th October* 1859, *submitting one from the Collector of Dharwar, with its accompanying Report by Dr. Forbes, on the operations of the Cotton Gin Factory there, for the Half-year ending the* 31*st May* 1859.

Copy of Dr. Forbes' Report, with the samples referred to in his 27th paragraph, should be forwarded for the information of the Chamber of Commerce.

2. Dr. Forbes has satisfactorily accounted for the diminution of work in the Factory. After the reports which have been received of the Macarthy gin, the first of the causes assigned may be held to have ceased. The stock of saws which the Home Authorities have been requested to supply may soon be expected, according to the advices received last mail, and the second cause for a falling off in the work will then be removed. But His Lordship in Council cannot expect that the supply of gins will be greatly increased until Dr. Forbes' return from his proposed visit to England.

3. Dr. Forbes' suggestion in paragraph 20, regarding the supply of uncleaned seed, may be recommended to the attention of the Chamber.

4. His Lordship in Council is not disposed to consider that irrigation would benefit early sown cotton. It is possible, however, that early sowing may be adopted with advantage for exotic varieties, although not suited to the indigenous sorts.

5. The correspondence regarding the adulteration of cotton by intermixture has been disposed of in resolution No. 4004, of the 11th instant.

(Signed) B. H. Ellis,
Acting Secretary to Government.

(True copies)
(Signed) B. H. Ellis,
Acting Secretary to Government.

Bombay Castle, 24th October 1859.

No. 1183 OF 1860.

REVENUE DEPARTMENT.

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce.

SIR,—I am directed to forward, for the information of the Chamber of Commerce, copies of the documents marginally noted, relative to a report by Dr. Forbes on the operations of the Cotton Gin Factory, at Dharwar, for the half-year ending November 1859.—I have the honor to be, &c.,

Letter (with accompaniments) from the Superintendent Cotton Gin Factory, Dharwar, No. 11, dated the 18th February 1860, to the address of the Collector of Dharwar.
Government Resolution No. 1181, of this date (communicated to the Revenue Commissioner Southern Division).

(Signed) H. YOUNG,
Chief Secretary to Government.

Bombay Castle, 27th March 1860.

No. 11 OF 1860.

To W. A. GOLDFINCH, Esq.,
Collector of Dharwar.

SIR,—I have the honor to submit the Half-yearly Report of Operations at the Cotton Gin Factory, for the period ending November 1859. Absence from Dharwar has prevented my being able to prepare it for transmission at an earlier period.

2. The amount of work performed during the term in question, as exhibited in the accompanying returns, has been as follows:—

Value of 23 gins completed, of 18 saws each.....Rs.	3,910	0	0
Do. of work done in 1 gin, of 18 saws, uncompleted	130	0	0
Do. of 18 gins completed, of 10 saws each..	1,980	0	0
Carried over....Rs.	6,020	0	0

Brought over....	Rs.	6,020	0	0
Value of alterations in completing an 8-saw gin.		2	0	0
Do. of 2 gins of 18 saws each, and 2 of 10 saws each, designed as models of cast iron gins from England.....		470	0	0
Cost of reconstructing a pile-engine for the Public Works Department.....		82	7	0
Value of repairs done to old gins in the districts.....		1,228	12	6
Do. of tools made for the use of the work-people.....		18	15	6
Outlay in experiments for the improvement of cotton-cleaning machinery.....		352	8	5
	Rs.	8,174	11	5
Outlay, viz.—				
Cost of materials consumed.. Rs. 2,679 3 2				
Do. of wages of work-people. 4,287 11 1				
		6,966	14	3
Balance in favour of the Factory, brought to the credit of Government.....		1,207	13	2

3. During the above six months, 46 gins were sold, of the aggregate value of Rs. 6,270, all of which amount has been recovered. Of these, 21 were of 18 saws, 20 of 10 saws, and 5 of 8 saws each.

4. The establishment has had a disadvantage to contend with, in the want of proper saws; all that remained were of a faulty description, and required to be altered by hand,—an operation which not only occupied a great deal of time, but for which nothing could be charged, otherwise than by enhancing the selling price of the gins, which would not have been desirable. It is now some time since the whole stock of old saws that could possibly be converted have been used up, and until the consignment expected from England arrives, no more new gins can be issued. The demand at the same time continues unabated; this is, however, partly owing to a considerable increase which has taken place this season in the cultivation of New Orleans cotton. The orders registered and unsupplied up to the present date amount in number to 41 gins, of the aggregate value of Rs. 5,480.

As soon as the saws arrive, about 30 of the above number can be prepared for delivery, and may still be available for the cleaning of this year's crop. The applicants will have to wait till next season for the remainder; and if matters progress satisfactorily, I hope that by that time the new iron gins from home will have been landed in the country.

5. I should, in this position, have been at a loss for present employment for the establishment. If disbanded, it would be difficult to replace the men, as they are chiefly trained and experienced hands; but my recent visit to the districts has pointed out a necessity which I am at present engaged in providing for, by measures which I trust will meet with the approval of Government.

6. There are now upwards of six hundred gins in use in this Collectorate, of which number about one-half are of the new form of construction, and the remainder of that previously supplied. The latter are constantly requiring repair, and a considerable proportion of the former also now begin to require looking to, having been for some years in work.

7. The fault the owners fall into, is neglecting the gin when it should first be attended to, and when probably a very trifling repair would preserve it in working order. In many instances, the defect is not noticed in time, and in others it is permitted to continue until the imperfect performance of one part injures the whole machine, and leads to the necessity of an expensive repair, which might easily have been avoided.

8. I was surprised to find this the case even in the close vicinity of the new Branch Factory at Karujghee, and the matter appeared to me to be of such importance, that I held a meeting of all the gin owners in the neighbourhood, to inquire into it. The parties most extensively concerned are the dealers and sowcars, many of whom own eight or ten gins each. They fully admitted what I had noticed at their establishments, and explained that under the existing circumstances they could not help themselves; that during the buying and working season they were often absent from their houses for two or three months together, engaged in purchasing cotton, and sending it in to be cleaned, and for the time being their machinery was entirely at the mercy of the hired coolies, who never missed an opportunity of tampering with it when it admitted of their being able to do so.

9. The system of work is by daily contract,—that is, so many maunds of kuppas to each gin, according to its size. The coolies are aware that, by loosening various parts of the machine, they can make the seed pass through it much more rapidly, though not so well cleaned ; and in this manner they got over the work often in less than half the time that it ought to occupy them, having the remainder of the day to themselves. During my inspections, I found abundant traces of this behaviour on the part of the coolies, and, in some instances, I discovered that the screw nails had been drawn, and the protecting casements removed from comparatively new gins,—a step they would not have ventured upon had the owners been there.

10. The loss caused in this manner must be very considerable, and all parties expressed a great desire that some means should be devised for protecting them from it. The plan which I suggested was most readily embraced by every one present, and, if successfully carried out, it will have the desired effect.

11. I proposed to relieve the owners of the care of keeping their gins in working order, on condition of a contribution being paid upon each machine, which, in the aggregate, would make up a sum sufficient for the pay of the establishment required. A portion of this establishment will be stationary at the Branch Factory, for the performance of such work as cannot be effected elsewhere, and the remainder will be divided into itinerant parties, provided with carriage, tools, and the materials necessary for minor repairs,—a district being allotted to each, of a size sufficient to admit of every gin being inspected at least twice a month during the working season.

12. The difference between this and the present arrangement will be that the labour of the establishment will become the property of the subscribers, and that they will have nothing further to pay for the repair of their gins except the value of the material consumed. Their accounts and money will be in their own hands, under the care of a punchayet appointed for the purpose.

13. On inquiry into the details, I found that a comparatively trifling sum (only Rs. 6 per annum) on each gin would suffice, but this was much below what was anticipated by the people, and they readily agreed to raise

it, provided it turned out that there was more work to be done during the present year than I had calculated upon.

14. This employment will absorb the greater part of the present establishment, and reduce the operations and monetary transactions of the Dharwar Head Factory to a very small amount. I am taking every precaution to secure its being successfully conducted, and to the satisfaction of the people, because it may be looked upon as the first important movement towards leaving the country to provide for its own wants in this respect, and for relieving Government of the necessity of requiring to do so.

15. The districts to the eastward are not included in this arrangement, being too far distant; but the ryots and dealers of Gudduck have settled amongst themselves for the building of a Branch Factory in that quarter, and during my recent tour I was asked by them to select the site and mark out the foundations. The building is now progressing rapidly, and will be covered in this season. Its situation is advantageous, as it will not only provide for the remaining part of this Collectorate, but also for a considerable portion of the Assigned Districts in the neighbourhood, in which the cultivation of New Orleans cotton may now be said to have fairly commenced.

16. In a recent communication, I mentioned the fact of the improvement that had taken place this year in the cultivation of American cotton in the southern districts; and, in connection with this, it is satisfactory to add, that I have recently received from Messrs. Nicol & Co. a very favourable account of the consignment of unmixed American cotton forwarded for the opinion of the home manufacturers. I beg to annex a copy of the letter, from which it will be observed that the supply was pronounced to be the best cotton seen for a long time. Further information is promised after it shall have passed through the hands of the manufacturer, but this much of itself must tend to confirm what I have often stated, viz. that the complaints from home are more to be attributed to adulteration and mixed cultivation, than to any injury inflicted upon the staple by the saw-gin.

17. There is also a consignment of Broach cotton cleaned by the Macarthy gin reported upon in Messrs. Nicol & Co.'s communication. This is probably the same supply alluded to by Mr. Fleming in paragraph 8 of his letter to Govern-

ment dated 19th August 1859, in which directions are given for the proper adjustment of the machine.

18. I take this opportunity of forwarding copy of a correspondence lately received from Major Meadows Taylor, Acting Commissioner of the Raichore Doab, on the subject of mixed cultivation of cotton, and the measures recommended for its prevention. I have stated my own views on this subject in a recent communication, and I have only to repeat, that from what I have seen of the willingness on the part of the cultivator to meet the wishes of those who are calling out for purer produce, I believe, that if he receives the encouragement which in his turn he has a right to expect, no legislative interference will be required in this quarter.

19. On the subject of "hybridising," my impression is, that the deterioration supposed to arise therefrom, and regarding which so much has been written, is to a great extent imaginary. I believe that this theory has been saddled with the whole burden of the evils arising from mixed cultivation and wilful adulteration of cotton.

20. The appraised value of the two consignments of New Orleans cotton in Messrs. Nicol & Co.'s letter (Report No. 2) is worthy of notice in this respect; the three bales being the first produce of new seed imported from America, the remaining eight that of the old seed formerly in the country. The difference of price may be accounted for by the improvement which might be expected in the quality of the former as the first return of a fresh importation of seed; on the other hand, the latter is not only the produce of seed which has been ten years in the country, but this same seed was also taken from cotton grown in mixed cultivation, and the return therefore should have carried with it all the defects that hybridisation could realise. I may mention, that the object in view in sending the two descriptions of cotton, new and old, was to endeavour, if possible, to throw some light upon this question; and I have also at present an experiment in progress, which will be concluded next season, and from which some satisfactory information may be expected.—I have the honor to be, &c.,

(Signed) G. F. FORBES,
Superintendent Cotton Gin Factory.

Dharwar, Cotton Gin Factory, 18th February 1860.

To Dr. FORBES,

Superintendent Government Gin Factory, Dharwar.

DEAR SIR,—We beg to hand you copies of reports received from England on the New Orleans seed cotton you purchased for us last season.

The first report was forwarded to us by the Cotton Supply Association, to whom we sent samples overland; the second is from our own agents, on samples drawn from the bales since their arrival in England.

The [W N & Co.]$_A$ mark consisted of cotton produced from the seed supplied by the Cotton Supply Association, and forwarded to you by the Bombay Chamber of Commerce.

The [W N & Co.]$_B$ mark is New Orleans cotton of the description ordinarily produced in the Southern Mahratta Country, but with which an admixture of Native cotton had been carefully prevented by weeding the fields. This is the cotton you sent us.

We forwarded overland, along with American samples, one of Broach cotton cleaned by us here with the Macarthy gin, and we think it may interest you to see the report upon it.

This cotton was produced from good Broach kuppas, of which we had several candies sent down for experiment. The kuppas was not specially selected for the purpose.

Subsequently to the cotton, of which the sample sent home was part, being cleaned, we had the leather roller of the Macarthy gin slightly pared down, so as to render the spaces between the spiral folds of the leather a little shallower. This has had the effect of preventing the passage of seed through the machine along with the cotton, obviating the objection referred to in the report.

We take this opportunity of begging you will take an early opportunity of forwarding a memorandum of the cost of the cotton which you had the kindness to purchase for us last season; and we remain, &c.,

(Signed) WM. NICOL & Co.

Bombay, 3rd December 1859.

REPORT No. 1.

This cotton is beautiful in colour and cleanliness; staple even and regular, but open and weak, and this reduces its value considerably, and is, we think, incidental to the climate. Value 6*d.* to 6¼*d.*, but if strong and close in staple it would have been worth 6¾*d.* to 7*d.*

N [W N & Co.] A

Equal in color to the last, but not so clean, and the staple is very short and uneven, as well as weak. Valuc 5¾*d.* to 6*d.* per lb.

N [W N & Co.] B

This is a beautiful quality of cotton, but badly cleaned (Macarthy ginned Broach); small seed and broken leaf; staple is fine, strong, and silky. Value 5¾*d.* to 6*d.*, but, perfectly cleaned, 6½*d.*

(Signed) PETHERINGTON, ZELL, & Co.,
Cotton Brokers, Liverpool.

REPORT No. 2,—*on Cotton per "Lincluden Castle."*

Choice saw-ginned, clean, well got up; good colour and fair staple: *the best cotton we have seen for a long time.*

N [W N & Co.]
A—3 Bales, value 6¼*d.*
B—8 do., do. 6¼*d.*

(True extract)
(Signed) WM. NICOL & Co.

(True copy)
(Signed) G. F. FORBES,
Superintendent Cotton Gin Factory.

No. 350 OF 1859.

FINANCIAL.

From Captain M. TAYLOR,
Deputy Commissioner Raichore Doab,

To Dr. FORBES,
Civil Surgeon, and Supt. of Cotton Experiments.

SIR,—I have the honor to forward, for your information, copies of correspondence as per margin, in relation to the supposed injury to cotton produce in general

From Major A. K. Thornhill, No. 1860, dated 9th November 1859.

From T. H. Bullock, Esq., Officiating Commissioner H. A. T., No. 1914, of 1st November 1859.

To First Assist. Resident.

From Depy. Commissioner Raichore Doab to First Assistant Resident, No. 414, of 14th November 1859.

by hybridisation between exotic and indigenous varieties, and mixing the two kinds for sale.

2. It may be doubtful, perhaps, whether hybridisation takes place between indigenous and exotic varieties, but there can be no doubt whatever that mixing the produce of New Orleans or other exotic cotton with that of indigenous cotton is injurious to the general staple, and amounts, in my opinion, to adulteration, which is punishable under an Act of the Supreme Government.

3. It may be impossible to prevent this adulteration of the New Orleans cotton, as it is difficult to be detected, except in the operation of machinery in England; and the comparatively low price of the indigenous cotton is an incentive to fraud. But as a good deal of the adulteration may proceed from the two cottons being sown together in the same land, and therefore picked together and so mixed, I think it may be perfectly practicable to prevent this, by making it penal to sow the two kinds together, and punishable by a light fine.

4. I consider, also, as I have stated to the Resident and the Commissioner, that I conceive it is perfectly practicable to prevent mixed sowings, firstly by explanation to the ryots that it was injurious to both kinds, and that the act was punishable; and secondly, by requiring Mamlutdars, and especially Moolkee and Police Patels, to see that no mixture was allowed to remain in the fields, and requiring owners of fields in which any mixture of plants, great or little, might be observed, to pull up the indigenous plant, and retain the New Orleans in all cases where the latter was the crop intended.

5. Such a supervision might, I consider, be easily made, without vexatious interference, and would answer every purpose required of protection of the staple as far as natural produce is concerned. After that, and in the event of adulteration by admixture of Native cotton, the detection could only be made by merchants, and would, I conclude, be punishable under the Act. Under these impressions, I have

taken the liberty to bring the subject to your notice.—I have the honor to be, &c.,

(Signed) MEADOWS TAYLOR,
Deputy Commissioner Raichore Doab.

Deputy Comr.'s Office, Camp Kokunoor, 29th Dec. 1859.

No. 1800 OF 1859.

CIVIL DEPARTMENT.

To Captain M. TAYLOR,
Deputy Commissioner Raichore Doab.

SIR,—I have the honor, by desire of the Resident, to acknowledge the receipt of your letter No. 402, of the 4th instant, and of the sample of cotton therewith forwarded, grown at Shorapoor, this year, from New Orleans seed, obtained at Dharwar.

2. With reference to your 5th paragraph, Colonel Davidson begs that two small bales only of the cotton may be sent here.

3. I am desired to take this opportunity of forwarding for your information copy of a letter, No. 1914, of the 1st instant, from the Officiating Commissioner of the Hydrabad Assigned Districts, relative to the introduction of foreign descriptions of cotton into the Hydrabad territories, and the evils that may be apprehended from their mixture with the indigenous cotton, upon which subject the Resident would be glad to be favoured with your opinion.—I have the honor to be, &c.,

(Signed) A. R. THORNHILL,
First Assistant Resident.

Hydrabad Residency, 9th November 1859.

GENERAL FINANCIAL No. 1914 OF 1859.
DEPARTMENTAL No. 473.

FINANCIAL.

From T. H. BULLOCK, Esq.,
Deputy Comr. in charge of Commissioner's Office,

To the FIRST ASSISTANT RESIDENT,
Hydrabad.

SIR,—It has probably attracted the notice of the Resident, that very considerable inconvenience and difficulty have arisen in the Bombay Presidency from the incautious introduction of foreign descriptions of cotton. First, it is found that the Natives will mix up the American and Native cotton in the same bales, to the serious detriment of this staple as a commercial product; and secondly, it is found that the culture of the foreign and Native cotton hybridises the whole of the product, and the result is that the whole is deteriorated.

2. The Chamber of Commerce is entreating the Government to interfere by legislative enactment, and the Government consider that the merchant should protect his own interests by resolutely refusing to purchase mixed or deteriorated cotton; but wherever the remedy lies, it is clear, from the correspondence published in the newspapers, that an evil of progressive magnitude has resulted from the incautious introduction of a new growth of cotton; and with reference to the great importance of this subject to the interests of the Assigned Districts, I would strongly advise that we should entirely cease to encourage experiments on this point.

3. As yet, the Native cotton is quite pure, and it finds at home a ready market, at a high rate; and I am quite aware that the broker and manufacturer, both in Liverpool and Manchester, require that the Indian and American cotton should be separately purchased, and that the proportion of each should be entirely under their control, some manufacturers requiring more of one and less of another, and *vice*

versâ, but in every case the proportion is regulated on strict calculation.—I have the honor to be &c.,

(Signed) T. H. BULLOCK,
Deputy Comr. in charge Commissioner's Office.

Commissioner's Office, Camp Booldanah, 1st Nov. 1859.

(True copy)

(Signed) HASTINGS FRASER,
Second Assistant Resident,
For Captain M. TAYLOR,
Deputy Commissioner Raichore Doab.

No. 414.

FINANCIAL.

From Captain M. TAYLOR,
Deputy Commissioner Raichore Doab,
To Major A. R. THORNHILL,
First Assistant Resident, Hydrabad.

SIR,—I have the honor to acknowledge the receipt of your letter of 9th instant, as per margin, and to state, for the information of the Resident, that I entirely concur in the remarks which Mr. Bullock has made on the subject of mixing cotton, and also of the injurious effect of hybridising the Native cotton by New Orleans, or other exotic kinds.

No. 1800, enclosing copy of a letter from Officiating Commissioner, in regard to cotton.

2. When I was engaged in cotton experiments at Shorapoor in 1850 to 1852, the Superintendent Cotton Experiments at Dharwar, in forwarding American seed, drew my attention prominently to the necessity of keeping the American cotton entirely distinct from the indigenous plant, and directed, in case the two kinds should ever be sown in the same land, to have lines of jowaree or castor-oil plant sown between, which would prevent the mixture of cotton. In practice, however, I kept the cottons essentially separate, and should consider it most necessary that this point should be particularly insisted upon whenever trials are made with any kinds of exotic seed.

3. If strict attention is paid to the separate sowings of cotton, I do not think there can be any objection to the continuation of experiments with different kinds of seed. In the Dharwar districts, I am given to understand that the New Orleans has now in a great degree supplanted the Native cotton altogether, because it bears heavier crops, and commands a better price. In this respect, it is worthy of introduction into any locality where it will succeed. But it does not succeed everywhere, and I have recently seen specimens of this cotton at Lingasoogoor which are coarse and short in staple, and inferior to the indigenous cotton.

4. The American cotton alluded to by Mr. Bullock in the 3rd paragraph of his letter is real American, not the exotic of this country. I doubt whether cultivation here will ever ensure the same quality, or that Americo-Indian produce will ever rise to the same grade of use or value in manufacture; but if, by perseverance and encouragement, we can give the Indian ryot a cotton which produces more, and is of a higher price than his own, I think we are warranted in continuing experiments to this end.

5. Caution is nevertheless required, and those to whom the seed for sowing is entrusted should be most careful not only in seeing that no mixture of the plants takes place in sowing, but in cautioning the producers as to mixtures of qualities. To my perception, the greatest danger is to be apprehended from the adulteration of cotton with the ordinary kind; but this is an evil which the merchants only can prevent, by detecting adulteration, which is punishable under an Act of Government.

6. If exotic cotton of any kind gains footing in a district, a local rule might be established, making mixed sowings an offence to be punished by fine; and the attention of Police and Moolkee Patels should be enjoined to this subject. This would not prevent adulteration, which could only be detected by the purchasers.—I have the honor to be, &c.,

(Signed) MEADOWS TAYLOR,
Deputy Commissioner Raichore Doab.

Depy. Comr.'s Office, Camp Kunageeree, 14th Nov. 1859.

No. 437 OF 1859.

From Captain MEADOWS TAYLOR,
Deputy Commissioner Raichore Doab,

To T. H. BULLOCK, Esq.,
Officiating Commissioner H. A. T., Jaulnah.

SIR,—I have the honor to acknowledge the receipt of your circular letter No. 108, of 14th instant, and to transmit herewith, for your information, copy of a letter, No. 414, of the 14th instant, which I addressed to the First Assistant Resident in reference to your letter No. $\frac{9}{473}\frac{14}{}$, copy of which was forwarded to me.

2. I quite agree with you, that the subject is of great importance, and, in all trials and cultivation of exotic cottons, district officers should take measures to prevent the hybridising of cotton, which no doubt is mischievous. The mixing of seed in sowing, and the sowing of one kind of seed near another, might be made punishable by fine. It would be difficult to detect mixtures of cotton in bales, but as this would come under the category of adulteration, it would be punishable under an Act of Government, which is in force in the Bombay Presidency, and could be introduced into these districts.

3. In regard to sowing, circular orders might be issued to Moolkee Patels of villages, and they might be made fairly responsible that the prohibition of mixed sowings was understood by the ryots, and enforced.—I have the honor to be, &c.,

(Signed) MEADOWS TAYLOR,
Deputy Commissioner Raichore Doab.

Depy. Comr.'s Office, Camp Holigee, 26th Nov. 1859.

(True copies)

(Signed) MEADOWS TAYLOR,
Deputy Commissioner Raichore Doab.

Depy. Comr.'s Office, Camp Kokunoor, 29th Dec. 1859.

(True copies)

(Signed) G. F. FORBES,
Superintendent Cotton Gin Factory.

STATEMENT No. 8.

COTTON PLANTERS' REPORT FROM 1ST JUNE TO 30TH NOVEMBER 1859, IN THE DHARWAR COLLECTORATE.

STATEMENT

Cotton Planters' Report from 1st June to 30th

TALOOKAS.	Remarks on the Past Season as to how far anticipations regarding the Crop and its disposal were realised.	Supposed Proportion of the Last Year's Crop which has been cleaned in the Saw-Gins, or will be so cleaned.				For Sale in the Factory.	In Use.		Out of Use.	
		New Orleans.	Broach.	Total Foreign.	Country Cotton.	Belonging to Government.	Belonging to Private Individuals.		Belonging to Private Individuals.	
		Candies of 784 lb. each.	Candies of 784 lb. each.	Candies of 784lb. each.	Candies of 784lb. each.	Number and Size of Gins.	Number and Size of Gins.	Talookas.	Number and size of Gins.	Talookas.
1	2	3	4	5	6	7	8	9	10	11
		Cds. lb.	Cds. lb.	Cds. lb.	Cds. lb.	2 Gins of 20 Saws.	6 Gins of 40 Saws.	Unable to state, as the gins are constantly removed about from one Talooka to another, and often into the adjacent Madras districts and Inam villages, according to the requirements of the owner.	None that I	am aware of.
	Season was favourable, and anticipations about the yield of the crop were nearly realised.	23,361 25½	....	23,361 25½	65,011 290	22 do. of 18 do.	2 do. of 25 do.			
						13 do. of 10 do.	1 do. of 24 do.			
						2 do. of 4 do.	13 do. of 20 do.			
						1 Cotton thrasher.	1 do. of 19 do.			
						1 Egyptian churka.	253 do. of 18 do.			
						2 Roller-gins.	1 do. of 15 do.			
						1 Macarthy gin.	8 do. of 14 do.			
							3 do. of 13 do.			
							212 do. of 10 do.			
							76 do. of 8 do.			
							144 do. of 7 do.			
						45	720			

Dharwar, Cotton Gin Factory, 18th February 1860.

No. 8.

November 1859, *in the Dharwar Collectorate.*

GINS.

Completed in the present Half-year.		Being made.			Sold for Government during the Half-year under report.		Profit or Loss to Government, deducting the Cost of European Superintendence.	Total Net Expenses on account of Experiment from the commencement to the close of the Half-year preceding that under report.	Total Expenses for the Half-year under report.	Prospects of the coming Season.	REMARKS.
Belonging to Government.		For Government.	For Private Individuals.								
Number and Size of Gins.	Value.	Number and Size of Gins.	Number sold.	Size of Gins.	Number and Size of Gins.	At what Cost.					
12	13	14	15	16	17	18	19	20	21	22	23
	Rs.					Rs. a. p.					
23 Gins of 18 Saws.	3,910	1 Gins of 18 Saws.			21 Gins of 18 Saws.	3,570 0 0	Net profit during the six months under report, Rs. 1,207-13-2, as shown in the accompanying Abstract Statement of Cost and Return.	Total expenses ..... Rs. 6,31,285 10 2 Total receipts ..... 2,11,049 0 9 Balance.... Rs. 4,20,236 9 5	Total receipts..... Rs. 9,751 11 0 Total expenses..... 8,975 15 6 Balance.... Rs. 775 11 6	Promising.	
18 do. of 10 do.	1,980	11 do. of 8 do.			20 do. of 12 do.	2,200 0 0					
1 do. of 8 do.	100	1 Cotton-cleaning machine.			5 do. of 8 do.	500 0 0					
		26 Roller-churkas.				Rs. 6,270 0 0					
					Add—						
			None.		Value of Repairs to saw-gins	1,228 12 6					
42 .. .. Rupees	5,990	39			46 .. .. .. Rs.	7,498 12 6					

(Signed) G. F. Forbes,
Superintendent Cotton Gin Factory.

STATEMENT No. 9.

Expenditure of the Cotton Experiments, Dharwar Collectorate, from the commencement

				Rs.	a.	p.
cement up to the half-year				2,11,049	0	9
DER REPORT.						
November 1859.						
2,212	0	0				
1,480	0	0				
710	0	0				
1,445	0	0				
840	0	0				
1,615	0	0				
			8,302	0	0	
57	4	4				
64	12	9				
104	6	9				
127	2	0				
11	4	0				
108	11	0				
			473	8	10	
130	0	0				
16	0	0				
30	0	0				
			176	0	0	
carriage and			24	6	8	
				8,975	15	6
		Rs.		2,20,025	0	3
				2,21,012	4	11
		Rupees		6,41,037	5	2

Amount of expenses from the commencemer preceding that under report.....

FOR THE HALF-YEAR UNDER

From 1st June to 30th Novem

Allowance to Dr. G. F. Forbes, Superintendent Cotton Gin Factory, from 1st May to 31st October 1859, at Rs. 200 per month .....Rs. 1,2

Salary of the establishment of the Cotton Gin Factory, from 1st May to 31st October 1859 1,7

Batta to the establishment, passed audit for t from March to July 1859 .....

Sundry expenses for constructing saw-gin bills audited for the following months, viz

January 1859	.....	Rs.	6
March	„		2,2
April	„		5
May	„		7
June	„		5
July	„		6

Value of the undermentioned articles supplie Principal Commissary of Ordnance, as p Assistant Military Auditor General's bil of 20th September 1859 :—

Lathe, turner, Europe, complete with tools, 6th size, 6 feet bed .....Rs. 1,2

Charges for packing the above, as per bill No. 85, of 20th September 1859..

February 1860.

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STATEMENT No. 10.

Detailed Memorandum of Sums Collected during each of the Six Months embraced in the Cotton Planters' Report for the Half-year commencing 1*st June and ending* 30*th November* 1859, *for Gins sold, and Value of Repairs to Gins during that period; also for Repairs to Gins and Gins sold during the previous Half-year.*

Months.	Sums collected during the present Half-year for Gins sold prior to 1st June 1859.			Sums collected for Gins sold during the Half-year under report.			Sums collected during the present Half-year for Repairs made prior to 1st June 1859.			Sums collected for Gins Repaired during the Half-year under report.			Total.			Remarks.			
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.				
June 1859..	1,742	0	0	470	0	0	50	15	0	6	5	4	2,269	4	4	Amount collected for sale and repair of saw-gins in the six months under report.....Rs.	8,775	8	10
July „ ..	250	0	0	1,230	0	0	49	4	9	15	8	0	1,544	12	9	Advances deposited for gins to be disposed of	176	0	0
August „ ..	90	0	0	620	0	0	81	4	3	23	2	6	814	6	9	Advances made for carriage of saw-gins, and packing charges, &c., recovered	24	6	8
September „ ..	440	0	0	1,005	0	0	114	6	0	12	12	0	1,572	2	0				
October „ ..	....			840	0	0	....			11	4	0	851	4	0				
November „ ..	170	0	0	1,445	0	0	16	0	0	92	11	0	1,723	11	0				
Total....Rs.	2,692	0	0	5,610	0	0	311	14	0	161	10	10	8,775	8	10		Rs. 8,975	15	6

Dharwar, Cotton Gin Factory, 18*th February* 1860.

(Signed) G. F. Forbes,
Superintendent Cotton Gin Factory.

STATEMENT

Dr. *Abstract Statement showing the Cost and Return of the Cotton Gin*

					Rs.	a.	p.
By value of 23 gins of 18 saws each, completed, at Rs. 170 each				Rs.	3,910	0	0
Do. of work done on 1 gin of 18 saws, being made..					130	0	0
Do. of 18 gins of 10 saws, completed, at Rs. 110 each ..					1,980	0	0
Do. of alterations in completing an 8-saw gin					2	0	0
							6,022 0 0
Value of repairs to saw-gins..					1,228	12	6
Do. of 2 gins of 18 saws, and 2 gins of 10 saws, designed as models of cast-iron gins from England					470	0	0
Cost of reconstructing a burnt pile-engine for the Public Works Department, Dharwar					82	7	0
Do. of experiments for the improvement of cotton-cleaning machinery					352	8	5
Do. of tools made for the use of the workpeople, viz.—							
18 Plane blades	..	Rs.	9	2	0		
3 Carpenters' chisels			0	12	0		
2 Bits			0	1	6		
1 Screw-driver			0	8	0		
1 Anvil, country			2	0	0		
3 Tongs			1	0	0		
3 Hammers			4	0	0		
2 Dees			0	8	0		
2 Squares			1	0	0		
					18	15	6
							2,152 11 5
Total.....Rs.							8,174 11 5

Dharwar, Cotton Gin Factory, 18th February 1860.

No. 11.

Factory, Dharwar Collectorate, from 1st June to 30th Nov. 1859. **Dr.**

				Rs. a. p.
To Cost of Establishment :—				
Salary of the fixed establishment, exclusive of the European Superintendent and a Mechanical Overseer .. .. Rs.	1,504 15 3			
Batta to the fixed establishment, exclusive of do. and do.	41 13 0			
Wages to the contingent establishment ..	2,740 14 10			
Cost of Materials :—		4,287 11 1		
65 mds. 9 lbs. 12 oz. of square iron of sizes, at Rs. 1-14-0 and upwards per md. of 28lb .. .. Rs.	122 4 9			
100 „ 15 „ 3 „ of round do., at Rupees 1-14-0 do. do.	186 7 3			
28 „ 4 „ 13 „ of sheet do., at Rs. 3-2-0 do. do.	87 15 8			
26 „ 6 „ 10 „ of flat do., at Rs. 1-13-0 do. do.	47 8 8			
5 „ 0 „ 13 „ of steel from old files, at Rs. 3-8-0 do. do.	17 9 5			
15 „ 17 „ 1 „ of old brass, at Rupees 14-0-0 do. do.	182 1 7			
37 „ 19 „ 11 „ of zinc, at Rs. 4-8-0 do. do.	174 0 6			
123 „ 11 „ 4 „ of barrel iron, at Rupees 0-11-0 do. do.	84 13 1			
101 gross 2 dozens and 7 screws of sizes, at different rates	70 0 2			
Wear and tear of files 297	116 13 0			
27 buffaloe hides, weighing 18 mds. 9lb., 7 oz., at Rs. 4-4-0 and upwards per md. of 28 lb.	77 14 10			
558 puras of charcoal, at puras 12 per rupee ..	46 8 0			
2 circular saws of 12 inches, at Rs. 2 each ..	4 0 0			
684 do. of 10 do. at Rs. 1-2-4 do.	783 12 0			
36½lb. of bristles, at Rs. 2 per lb	73 4 0			
7 teak logs, measuring 119 cubic feet 6¾ in., at as. 8 per foot and above	59 12 1			
73 honny do. 1,239 do. 4½ in., at as. 4 per do. do.	309 13 6			
15 babool blocks, at as. 12 each	11 4 0			
Cost of Sundry Expenses :—		2,455 14 6		
June 1859 .. .. Rs.	20 8 9			
July „	46 13 7			
August „	45 7 7			
September „	20 15 0			
October „	23 9 5			
November „	65 14 4			
		223 4 8		
			6,966 14 3	
Profit to Government for the half-year			1,207 13 2	
Total..... Rs.			8,174 11 5	

(Signed) G. F. FORBES,
Superintendent Cotton Gin Factory.

STATEMENT No. 12.

Detailed Memorandum of the Number, Size, and Value of Gins made and sold during the Half-year ending 30th November 1859, and the Balance of Cotton Machines in Store.

	Machines.																			
	Gins of 20 Saws.		Gins of 18 Saws.			Gins of 10 Saws.			Gins of 8 Saws.			Gins of 4 Saws.		Cotton Thrashers.		Egyptian Churkas.		Roller Gins.		Macarthy Gins.	
	Number.	Value.	Number.	Value.	Value recovered.	Number.	Value.	Value recovered.	Number.	Value.	Value recovered.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
Number which were on hand at the close of the last half-year.. ..	3	..	20	..	..	15	..	..	4	..	..	2	..	1	..	1	..	2	..	..	..
Ditto completed during the present half-year..	..	..	23	..	..	18	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Received from England..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Total..	3	..	43	..	..	33	..	..	5	..	..	2	..	1	..	1	..	2	..	1	..
Deduct—																					
Number sold in the present half-year.. ..	..	..	21	3,570	3,230	20	2,200	2,070	5	500	310	..	..	..	..	..	..	..	..	..	..
Balance of cotton machines on hand, except those being made ..	3	..	22	..	..	13	..	..	..	..	..	2	..	1	..	1	..	2	..	1	..

Dharwar, Cotton Gin Factory, 18th February 1860.

(Signed) G. F. FORBES,
Superintendent Cotton Gin Factory.

STATEMENT No. 13.

Statement of Gins Sold during the Half-Year ending 30th November 1859.

Months.	Description of Gins.						Total.		Remarks.
	Of Saws 18 each.		Of Saws 10 each.		Of Saws 8 each.				
	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.	
		Rs.		Rs.		Rs.		Rs.	
June 1859 ...	3	510	4	440	..	....	7	950	
July „ ...	4	680	3	330	2	200	9	1,210	
August „ ...	1	170	5	550	1	100	7	820	
September „ ...	9	1,530	2	220	..	....	11	1,750	
October „ ...	3	510	2	220	..	....	5	730	
November „ ...	1	170	4	440	2	200	7	810	
Total..	21	3,570	20	2,200	5	500	46	6,270	

Dharwar, Cotton Gin Factory, 18th February 1860.

(Signed) G. F. Forbes,
Superintendent Cotton Gin Factory.

STATEMENT No. 14.

Statement showing the Number of Carts made and sold under the authority of the Government Resolution No. 4597, *dated* 8*th August* 1853, *(received with the Revenue Commissioner Southern Division's Memorandum No.* 2125, *dated* 11*th August* 1853,*) during the Half-year ending the* 30*th November* 1859, *in the Dharwar Collectorate.*

Number of Carts authorised to be constructed by Government Resolution No. 4597, dated 8th Aug. 1853.	Number out of them Constructed up to the Half-year ending 31st May 1859.		Number sold up to the Half-year ending 31st May 1859.		Number of Carts constructed during Half-year under report.		Number of Carts sold during the Half-year under report.		Balance remaining in hand at close of the Half-year under report.		Number of Carts being made at the close of the Half-year under report.		Remarks.
	No.	At what Cost.	No.	At what Cost.	No.	At what Cost.	No.	At what Price.	No.	Value.	No.	Cost.	
		Rs. a. p.		Rs. a. p.		Rs.		Rs.		Rs.		Rs.	
50	23	987 8 10	23	833 6 11	..	..	..	..	..	..	..	..	

Dharwar, Cotton Gin Factory, 18*th February* 1860.

(Signed) G. F. Forbes,
Superintendent Cotton Gin Factory.

No. 1181 OF 1860.

REVENUE DEPARTMENT.

Copy of the Resolution passed by Government on a Memorandum from the Revenue Commissioner Southern Division, No. 401, *dated the 5th March* 1860, *submitting a letter from the Collector of Dharwar, and its accompanying Report by Dr. Forbes, on the operations of the Cotton Gin Factory there for the Half-year ending November* 1859.

THE report for this half-year is very satisfactory, and His Lordship in Council is much gratified at the beneficial result of Dr. Forbes's recent tour.

2. The engagement entered into by the owners of gins, to subscribe funds for the support of an establishment for the repair of their gins, is evidence of an improved feeling, which cannot fail to be productive of important consequences. The spirit of the people has been further shown in the erection of a Branch Factory at the eastern districts of Dharwar, at the expense of local contributors.

3. It is gratifying to find that the New Orleans cotton has now become fairly established in the Ceded Districts.

4. It is to be regretted that owing to the non-arrival of the saws expected from England, many applicants for gins have been disappointed; these saws have now been received, and it is hoped they will immediately be made available. With reference to Dr. Forbes's 4th paragraph, if an additional supply is required, no time should be lost in applying for it.

5. The correspondence with Messrs. Nicol & Co. is interesting, as showing the effect of keeping cotton free from adulteration.

6. The papers may be placed at the disposal of the press, and copies of the report forwarded to the Chamber of Commerce and Manchester Cotton Association.

(Signed) H. YOUNG,
Chief Secretary to Government.

(True copy)

(Signed) H. YOUNG,
Chief Secretary to Government.

Bombay Castle, 27th March 1860.

To the MEMBERS of the CHAMBER OF COMMERCE.

'GENTLEMEN,—It has been intimated to the Chamber by the Government, that Dr. Forbes is shortly expected in Bombay, and would wish to have his newly invented cotton churka tested in the presence of those interested in the matter. It has therefore been arranged by the Committee that Thursday next, at noon, shall be appointed for the experiments, in the rooms of the Chamber, when it is requested that Members will attend, with those of their friends who take an interest in the subject of the improvement of cotton. —I remain, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 9th March 1860.

OPINIONS.

DR. FORBES'S COTTAGE CHURKA.

THIS machine is designed for cleaning Native Indian kuppas.

In principle, it is almost identical with the Guzerat churka; but certain mechanical appliances, of a very simple character, enable it to be worked by one instead of two persons, and to turn out a very much larger quantity of clean cotton in a given time than the rude Native instrument.

The first and most important question for consideration is, whether it cleans cotton without injuring the staple.

I am of opinion that it does not injure the fibre; and I arrived at this opinion after repeated examinations, and comparisons of cotton cleaned by it and the Native churka.

The present machine has been adjusted for cleaning kuppas peculiar to the Southern Mahratta Country; but Dr. Forbes states that, by slightly altering the relative size of the rollers, it may be adapted for cleaning any description of Native cotton.

Even in its present state, however, this machine cleans Surat kuppas well.

I have stated that I do not think it injures the fibre of the cotton in the process of cleaning, and is, in this respect, quite equal to the common Native churka.

But what are the economical advantages of this new machine?

Worked by one lad, it yesterday cleaned 3lb. of Dharwar kuppas, yielding three-fourths of clean cotton, in 5 minutes, = 36lb. kuppas or 9lb. cotton per hour = 360lb. kuppas or 90lb. cotton per diem.

The common instrument in use for cleaning cotton in the Southern Mahratta Country is the foot-roller (worked by one woman), which I believe can turn out about 12lb. clean cotton daily.

Comparing, therefore, Dr. Forbes's cottage churka with the foot-roller, we have a daily yield of 90lb. clean cotton against 12lb.,—the machine multiplying the power of a single person 7½ times.

Another trial of this churka was made with Surat kuppas, for which, as previously stated, it is not properly adjusted.

Two pounds of Surat kuppas, yielding two-thirds clean cotton (the yield of fibre from Native Guzerat kuppas is greater than from Dharwar kuppas), were cleaned in six minutes = 20lb. kuppas or 6⅔lb. fibre per hour = 200lb. kuppas or 66lb. fibre per diem.

The common Guzerat churka turns out only 28lb. to 30lb. clean cotton daily, and requires two persons to work it.

We thus find, that imperfectly adapted as this machine is, in its present form, for cleaning Surat kuppas, it quadruples the power of an individual, as compared with the common Guzerat churka.

A comparative trial with one of Dunlop's Macarthy gins was also made.

The Macarthy gin in question was imported by me about a year ago, and cost at home £12.

I have been told that similar gins, driven at high speed, have turned out as much as 10lb. clean cotton per hour, but I never obtained anything like such a result here.

The gin is called a cottage gin, and may be driven either by hand, or by other power. Worked by hand, it requires a feeder and a driver; but the labour of the driver is too severe to be sustained beyond a few minutes at a time.

But as regards the trial,—whilst Dr. Forbes's churka, worked by one lad, without any very violent effort, cleaned 3lb. kuppas in five minutes, the Macarthy gin, worked by two persons, with exertions which could not have been long

sustained, cleaned only 2lb. kuppas in the same time. The result per individual is as 6 to 2.

As a cottage churka, for cleaning Indian Native cotton, I am of opinion that this machine of Dr. Forbes's stands at present quite unrivalled.

It cleans cotton without injury to staple; it does a very large amount of work, with a comparatively small expenditure of force; and it is of very simple construction, not easily put out of order, or, if disarranged, may be very easily repaired.

The final question I consider is its cost. Dr. Forbes belives such machines can be supplied for Rs. 25 each.

Supposing each machine to cost Rs. 30, and taking its results with Surat cotton, as compared with the common churka, what would be the result to the possessor of one of these new churkas?

Interest on cost price at ten per cent.....	Rs. 3
Annual repairs	7
Allowance for wear and tear	10
	Rs. 20

Supposing it worked only three months in the year, we have a monthly charge of say Rs. 7 (the churkas are usually at work two to three months before the monsoon, and as long afterwards).

As previously stated, Forbes's churka can turn out 66lb.—say 60lb.—clean cotton daily, worked by one person, whilst the Native churka, worked by two persons, turns out only 30lb. We shall therefore require two churkas, costing about Rs. 2½ each, and four men, to do as much work as Forbes's churka and one man; and, comparing the monthly result, we have to pay for Forbes's churka—the wages of *one* man, 7 rupees; against, for Native churka—the wages of *four* men; and assuming wages at Rs. 6 per month, we have the former worked for Rs. 13 per month, and the latter for Rs. 24 per month,—showing a monthly gain in favour of Forbes's churka of Rs. 11.

(Signed) JOHN FLEMING.

Bombay, 19*th April* 1860.

I HAVE examined this cotton churka with the greatest care, and fully coincide in the opinions expressed by Mr. Fleming. I was at first under the impression that the doubled or rolled appearance of the cotton after delivery might militate somewhat against its value; but it readily falls into a loose state by a very trifling beating, and I cannot therefore regard it as at all a material objection. I have cleaned short-stapled Coompta and Surat cotton, and have tried it with rather long-stapled black-seeded cotton, and also with the large green-seeded tight-stapled American cotton. With the long-stapled cotton, it appears a little liable to clog, but only very slightly, and I do not think that it would materially affect the outturn. It cleans the American seed cotton very well, but is apparently rather slower than with the Native cotton. When, however, the fly-wheel is of iron, and consequently heavier, I believe the outturn with American cotton even will be very nearly equal to that with Native cotton. I consider it in every respect an admirable instrument for the purpose for which it is intended. I do not think that the staple of the cotton is injured in the slightest degree.

(Signed) H. BROOKE.

I HAVE seen Dr. Forbes's *cottage* churka tried with some Surat kuppas, which, in my opinion, it cleaned admirably, preserving the staple of the cotton uninjured, and separating the seed well. The labour of working the machine is light, in which respect it contrasts most favourably with the Dunlop gin. It is also neat and compact, occupying a small space, and the rollers do not appear liable to get easily out of order. If this gin can be supplied at a moderate cost, it is certain, I think, combining all the advantages pointed out by Mr. Fleming, to supersede the common Native churka, and in this respect it is the best invention of the kind I have either seen or heard of.

(Signed) HENRY SCOTT.

DR. FORBES'S POWER-CHURKA.

A MACHINE to clean Native cotton, with the rapidity of

the *saw-gin*, and at same time without injuring the staple, has long been wanted.

Dr. Forbes's invention appears to meet this want.

He has succeeded in economically applying power to the common churka.

Previous attempts to improve the churka have failed, chiefly from the difficulty of increasing the length of the rollers by which the seed is separated from the fibre, without destroying their rapidity—essential to the proper performance of their work.

Dr. Forbes has overcome this difficulty by a very simple arrangement.

His long rollers rest in bearings at short intervals of about 12 inches, and, in fact, form a series of common churkas of the usual size. The arrangement for feeding is ingenious and effective, and serves a double purpose; for whilst performing its peculiar function of feeding the rollers, it also beats out of the kuppas a large quantity of loose leaf.

Dr. Forbes has exhibited two machines, one of three ordinary churka lengths, the others of two lengths.

To the smaller machine a fanner may be attached, but it cannot be fairly tested without a proper lint house. It is not an essential part of the machine, and may be used or not, at pleasure.

Respecting the mechanical details of Dr. Forbes' ingenious power-churka, I am incompetent to offer an opinion, and can only judge of results.

The power-churka cleans Native cotton without injuring the staple, and works with as great rapidity as the saw-gin.

I have carefully examined samples of Dharwar, Surat, and Egyptian cotton cleaned in my presence, and could not detect any injury done to the staple in the process of cleaning.

A peculiar curl is given to the fibre by a wire used in this machine, and the cottage churka, for turning the cleaned cotton off the roller, and preventing clogging. I am of opinion that this does not injure the cotton in any respect, and were the cotton beaten after cleaning, as is usually done in Guzerat, the objectionable appearance, I think, would be removed.

Dr. Forbes states that the larger machine can clean 1000lb. kuppas, = 250lb. Dharwar cotton, daily, and requires two men to drive the fly-wheel, and a boy to feed.

The humid climate of Bombay is unfavourable to experiments in cotton-cleaning, and the full power of the machine cannot be exhibited here.

From its performances, however, I am quite satisfied that, under favourable conditions, it is quite able to turn out the quantity of work stated by Dr. Forbes.

If this be correct, how does it compare with the saw-gin, and the common churka?

Referring to notes made by me two years ago at the Government experimental establishment at Dhundooka, I find that—

A gin of 20 saws, costing Rs.160, worked by 8 men, produced about 200lb. clean cotton daily.

A common churka, worked by a man and woman, turned out 28lb. daily.

Dr. Forbes's churka, worked by 2 men and a boy, turns out 250lb. daily.

Comment is not necessary. The difficulty of getting labour for cleaning the cotton, especially in those districts where railway works are in progress, is becoming very serious, and even threatens the existence of the cotton trade.

Dr. Forbes's invention appears most opportunely.

His machine, cleaning cotton with as little injury to staple as the common churka, dispenses in a great measure with manual labour.

Driven by bullock, steam, or (still better, where such is available) by water-power, it requires only a few boys and girls as feeders.

(Signed) JOHN FLEMING.

Bombay, 19th April 1860.

I HAVE examined the gin with great attention, and fully coincide in every remark made by Mr. Eleming. It is, I think, everything that can be desired.

(Signed) H. BROOKE.

I BEG to suggest that the thanks of the Members of the Chamber of Commerce be given to Mr. Fleming for the

valuable information he has given respecting the advantages which Dr. Forbes's cottage churka possesses over any other cleaner yet invented.

(Signed) EDW. HEYCOCK.

[From the *Cotton Supply Reporter.*]

DR. FORBES'S NEW COTTON GIN,—THE IMPROVED CHURKA.

IN our last number we published three letters, by Mr. Crankshaw, inserted in the *Bombay Gazette*, drawing attention to a peculiar curl which was stated to be given to the cotton cleaned by Dr. Forbes's improved churka. We have now great pleasure in calling attention to the following letter of Messrs. Birley & Co., of Manchester, from which it appears that they "have failed in discovering the curl" described by Mr. Crankshaw. The cotton was ginned at these offices, and forwarded to Messrs. Birley & Co.'s mill for the purpose of testing:—

To Dr. FORBES, Bombay Army.

DEAR SIR,—We have passed the small bag of cotton which you brought to us through all the usual processes of spinning, and have spun it into 32's, weft cops. We watched it carefully through each process, with the view of ascertaining whether there is in it that peculiar "curl" described by Mr. Crankshaw of Bombay, and quoted in the *Cotton Supply Reporter* of 15th June, but have failed entirely in discovering it. We think the cotton was exceedingly well cleaned, and quite suitable for spinning purposes.—We remain, &c.,

(Signed) BIRLEY & Co.

Charlton Mills, 27th June 1860.

Dr. Forbes's improved Indian Churka.

The Committee of the Cotton Supply Association, in order still further to test the merits of Dr. Forbes's improved churka, had a quantity of cotton cleaned by this machine, which was forwarded to a spinner, who has passed this cotton through all processes, and finds that the fibre is in every respect uninjured. The results in the various stages of carding, drawing, slubbing, roving, weft, &c. may now be seen on application at the Office of the Cotton Supply Association, No. 1, Newall's Buildings, Manchester.

The Report of Messrs. Birley & Co., published in our last number, is thus more fully confirmed.

COTTON SUPPLY ASSOCIATION.

No. 244 of 1859.

To H. Brooke, Esq.,
Secretary to the Bombay Chamber of Commerce.

Sir,—I am desired by the Executive Committee of this Association to advise you that they have shipped per *Floating Light*, as per enclosed bill of lading, one ton of guano, and 2½ cwt. of nitrate of soda, which they have forwarded for distribution among the cotton growers in India, for the purpose of experiment. The Committee would be glad if your Chamber will undertake to furnish a report as to the utility of guano and nitrate of soda in the cultivation of the cotton plant, as founded upon the experience of the growers to whom you may think it advisable to send. I beg to enclose brief directions as to the mode of applying the same, and I am desired to state that the Committee are induced to take this step in consequence of information they have received as to the great benefit which has resulted from the use of these stimulants by cotton planters in the United States.

The Committee will be glad to receive from your Chamber any suggestions resulting from these experiments, and request me to assure your Chamber of their cordial appreciation of your past exertions and co-operation in behalf of

the important movement in which they are engaged; being sanguine in the belief that their efforts will result in the greatest benefit both to India and to this country.

A shipment of New Orleans cotton seed has been effected by our Liverpool agents, but bill of lading has not yet arrived. A further supply of new seed is now to hand, a portion of which will be shipped to the consignment of your Chamber by first favourable opportunity.—I remain, &c.,

(Signed) G. R. HAYWOOD,
Secretary.

Manchester, 9th September 1859.

P.S.—Since writing the above, I find that a shipment of 26 barrels of cotton seed has been effected along with the guano, &c.

Directions for the Use of Guano and Nitrate of Soda.

GUANO is best applied to the land by mixing it with three times its own bulk of sand, ashes, or dry earth, and spreading it during rainy weather on the land, at the rate of one or two cwt. of guano per acre.

It will be lost if spread during dry or sunny weather.

It may also be mixed with water, and in that way distributed to the plants.

The nitrate of soda should be treated in the same way.

To H. BROOKE, Esq.,
Secretary to the Bombay Chamber of Commerce.

SIR,—Your letter of the 5th July, some time since to hand, together with enclosures, have been duly submitted to the Executive Committee of this Association, and were inserted in No. 24 of the *Cotton Supply Reporter*, a copy of which was forwarded to you immediately after publication.

I have also to acknowledge the receipt of the sample of Sea Island cotton, which the Committee value at 15*d.* per lb.

I am desired to convey to your Chamber, and especially to Mr. Robt. Wallace, the best thanks of the Executive

Committee, for the care and trouble which they have taken in the distribution of the cotton seed.

We are now arranging for the shipment of 5 tons of fresh New Orleans seed, just received from the United States, which our Agents in Liverpool inform us will reach Bombay in January next.

The Committee were of opinion that it would be very expensive to forward the 5 bags of Sea Island seed which you ask for, overland, and as the vessel by which it will be sent will reach Bombay in January, it has been shipped accordingly, and it is hoped you will receive the present shipment of seed in good condition.

I beg to acknowledge the receipt of your letter of 20th August, just arrived, which has not yet been laid before the Committee, and in reply to which I shall have occasion to write to you in a few days.—I am, &c.,

(Signed) G. R. HAYWOOD,
Secretary.

Manchester, 24th September 1859.

To the SECRETARY BOMBAY CHAMBER OF COMMERCE.

DEAR SIR,—The Committee of this Association would be glad if you can furnish them with information as to the standing and respectability of Mr. Futtaychund Khemchund (of Ahmedabad), who has recently written to them on the subject of cotton cultivation in India. Two cotton gins were recently delivered to him by your Chamber, which were shipped to your care on his account.

I beg to enclose bill of lading for 100 barrels of New Orleans cotton seed (of this year's growth) shipped per the *Duke of Wellington* on the 25th October 1859, which I trust will arrive in good condition; and 4 barrels of Sea Island, as per bill of lading enclosed.

By next mail I hope to write to you in reference to your recent communications.—I am, &c.,

(Signed) G. R. HAYWOOD,
Secretary.

Manchester, 2nd November 1859.

No. 129 OF 1859.

To G. R. HAYWOOD, Esq.,
Secretary Cotton Supply Association, Manchester.

SIR,—I am directed by the Committee of the Chamber of Commerce to acknowledge receipt of your letters of 9th and 24th September, enclosing bills of lading for 26 barrels of New Orleans cotton seed, 13 barrels guano, and one barrel nitrate of soda, which the Chamber will endeavour to distribute to the best advantage.

You will learn with great regret, that of all the various parcels of cotton seed distributed from the last shipment, in no instance that has yet come to the knowledge of the Chamber has any of the seed germinated, and several of those among the Natives who received the seed have inquired whether they will be remunerated for their loss of time and expenditure. The Chamber has not yet given them a definite reply, but has intimated that the subject will be entertained, and requested them to furnish a memorandum of their actual loss by the experiments. Should the aggregate not be of importance, the Chamber would recommend your Association to recompense these persons, as otherwise they will be still more reluctant in future to try any fresh experiments.

Upon the subject of manure, and particularly guano and nitrate of soda, it must be borne in mind that the total cost of cultivation of cotton on the Native plan does not exceed usually Rs. 3 per acre, while only one cwt. of guano per acre would cost Rs. 5½ in England, or say Rs. 6½ in India. There is, therefore, but a slender prospect of the Natives finding it a profitable investment.

The usual crop per acre does not exceed 60lb. of clean cotton, which, at 3*d.* per lb., gives only Rs. 7½ per acre as value of produce; there is, therefore, but little margin to work upon. If it shall be found practicable to cultivate on the American system, the case might be different; but it will require time to work this out. Private experiments are being continued, but the difficulty of visiting the field renders European superintendence almost impossible.

The Great Indian Peninsula Railway is now open to Barsee Road, and if intelligent Native overseers can be procured, the experiment might be prosecuted there without

much difficulty, and a monthly visit be rendered practicable. Should this view appear feasible, the Committee will probably make use of a portion of the sum voted by your Association for this purpose.. The Committee are afraid, that without the field can be actually inspected periodically, it would be very unlikely that any Natives would follow implicitly the directions given to them.

It is very desirable that the cotton seed should arrive at the time you mention, as it could then be distributed before the monsoon, and the experiment of early sowing be fairly carried out in those districts that may be found suitable.

The last parcel of cotton seed, which has turned out a total failure, was shipped in bags, while the former, which proved sound, was sent in barrels; it will therefore be well to forward all future supplies in barrels. The Sea Island seed appears to be in bags, while the New Orleans is in barrels. The Committee will, however, ascertain, before distributing it in future, that the seed has not lost its vegetative power.—I remain, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 26th November 1859.

To H. BROOKE, Esq.,
Secretary Chamber of Commerce, Bombay.

SIR,—Your favour of the 26th November 1859 has been duly submitted to the Executive Committee of this Association, and I am desired to inform you that they exceedingly regret the misfortune which has occurred in reference to the previous shipment of seed, which has proved infertile, and they wait your further communication on the subject, and will be glad to entertain the views of your Chamber as to the question of recompense to those persons who have suffered from the use of the seed.

The Committee will be glad if, in all future cases, your Chamber will carefully test the fertility of any future shipments prior to their distribution.

In future, all seed will be shipped in good barrels. This plan has been adopted now for some time past, with the best results.

The Committee also note your valuable remarks in reference to the use of guano in cotton cultivation in India; but they hope the time may come when the advantages derived in the United States from the use of guano may also be experienced in India. This being a question of cost of carriage, it is hoped that the extension of railways, and the improvement in the system of water-carriage, may greatly tend to remove the difficulty.

It is with much regret that I have now to inform you, that the 5 tons of New Orleans seed, which was referred to in my former letter as intended to be shipped to your Chamber, has been delayed by accidents over which we could have no control. The 5 tons shipped on the 25th of October 1859 last, on board the *Duke of Wellington*, was lost in the Bay of Biscay, the *Duke of Wellington* being burnt. On the 3rd of October 1859 other 5 tons were shipped on board the *Gladiator*, at Liverpool, which vessel broke her back in the Mersey, and had to put back into dock. We endeavoured to get the seed for re-shipment from the owners of the vessel, but were informed that she would be ready for sailing, and would reach Bombay sooner than any other vessel about to start. This morning we are informed that considerable delay may yet occur, and it will be decided by our meeting tomorrow as to what course we must adopt. I shall not be able to delay this letter until after the meeting, or we shall lose the present mail. The Committee are greatly concerned as to the shipment of this seed, lest it should arrive too late for use during the coming season. The seed has been carefully warehoused, and there is every probability that it will retain its energy through another season, if kept dry and in a cool place.

The Committee desire me to call the attention of your Chamber to the expediency of adopting measures for collecting the best samples of American seed from plants grown in India, in order to obviate the necessity of importing seed from the States, and I am to inquire whether your Chamber could devise means by which either a portion of land could be set apart for careful culture, with a view to raising select plants for seed, or whether any number of respectable cultivators could be induced to select their best plants, and preserve the seed for this purpose. It is presumed that 20 tons of good seed might be thus obtained at as little cost as we

now supply 5 tons; and the risks of shipment would be obviated, could your Chamber influence the Government to take steps for carrying out this suggestion, or for buying up for re-distribution a large quantity of this select American seed. If there be no practical impediment to such a course, the Committee of this Association are assured that no step could be taken more likely to improve the staple of Indian cotton, and raise it into successful competition with that of the United States.

We are in process of forming a Trade Museum at these offices, to comprise not only our cotton samples from all parts of the world, but especially samples of Indian cloths and manufactures, which it may be desirable to get imitated in this country. The Committee will be glad if your Chamber will from time to time furnish samples of Native cloth, or other articles, stating their prices or value in India, in order that the attention of our manufacturers may be called to them; and any information or suggestions which your Chamber can furnish in reference to the utility of this Museum will be valued by the Committee of this Association.—I have the honor to be, &c.,

(Signed) G. R. HAYWOOD,
Secretary.

Manchester, 9th January 1860.

To H. BROOKE, Esq.,
Secretary Bombay Chamber of Commerce.

DEAR SIR,—As advised in my last letter, you are aware that we have twice shipped 100 barrels of New Orleans seed to your Chamber, first by the *Duke of Wellington*, which was burnt in the Bay of Biscay, and next per the *Gladiator*, which broke her back in the Mersey. Next, we transhipped from the *Gladiator* to the *Ann Mitchell*, which I have now to inform you was *totally lost on the bank of Arklow*. We fear now that we are too late for the coming season; but it has nevertheless been determined to ship 100 *bushels* of New Orleans seed per the *John Wood*, which sails, in about twelve or fourteen days, from Liverpool. Our stock of seed is

low, or we might have sent more. (Fortunately, both the 100 barrels of seed were insured.)

I am now negotiating for the transmission of one ton of Egyptian seed, direct from Egypt, *viâ* the Red Sea, to your Chamber, which may possibly arrive in time to be of service. At all events, the experiment is being tried, and we trust some useful result may accrue.

Messrs. Thacker & Co., of London, have undertaken to forward to your address a parcel containing packages of cotton, a photograph of the various lengths of staple, and a series of queries and letters addressed to gentlemen in the service of Government in different parts of the Bombay Presidency. The names have been kindly furnished to me, with the addresses, by Dr. Watson, of the India House, and they are taken from the *India Register* for 1859—2nd edition, May 10th. Our Committee will be greatly obliged if your Chamber will verify these addresses (in case of change in any of the names), and kindly forward the various packets to their respective addresses, with as little delay as possible. The packets are left unsealed, that you may be informed of the contents. The Committee have great hopes that the replies to be received from these papers will furnish them with much valuable information; and if your Chamber can usefully dispose of similar packets (with photograph samples, queries, &c.) they will be glad to furnish them. Should any suggestion occur to the Chamber arising from the subject, I shall be glad to hear from you.

Bill of lading of the cotton seed shall be forwarded to you when shipment is effected.

You will observe that a Museum of manufactures, cotton samples, &c., is referred to in the letter which accompanies the queries. Should your Chamber be disposed to forward a collection for exhibition, our Committee will be greatly obliged.

Be pleased to inform me of the expenses you incur in forwarding the packets.—I am, &c.,

(Signed) G. R. HAYWOOD,
Secretary.

Manchester, 2nd February 1860.

(Copies.)

SIR,—The Committee of the Cotton Supply Association are anxious to avail themselves of the valuable information which you are able to afford respecting the cultivation of cotton in the districts of India under your care, or around you. They have received from the India House the addresses of gentlemen who occupy similar positions to yourself, and they hope to receive a large amount of important information, bearing upon the national objects in which they are engaged. They will be greatly obliged by your giving the enclosed queries your early and best attention, and that you will direct your replies to me, together with any samples of cotton, most nearly approaching the enclosed *American*, which you can procure in your district.

In replying to these queries, will you be pleased to furnish a *glossary* of any Native terms, names, or phrases, which may be used in your replies, together with Indian measures, weights, or money, calculated for English readers.

The enclosed sample of American cotton is sent in order that it may be exhibited to Native cultivators and others as a guide, and with a view to lead them to produce the article of the quality most in demand in England. This sample is worth 2*d.* to 3*d.* per lb. more than the best Indian imported into Liverpool. The enclosed photograph demonstrates the relative values of the various cottons in use in this country, according to the length of the fibre. I shall be glad to supply you with any quantity of the samples and photographs which you may require for exhibition.

The Association is forming a museum for samples of cotton from all parts of the world, as well as of commercial products, and the Committee will be glad to receive from you specimens of Native cloths or manufactures (stating their value or market prices) which it would be useful for us to imitate in this country, or other products (stating value, &c.) of India calculated to excite attention to the vast resources of the country, with your observations thereupon.

It is impossible to overrate the value of the information which you have it in your power to furnish for the benefit of Great Britain and of India.

The Association can furnish you with any number of

copies of their treatise on cotton cultivation (the American system), and will forward to you a copy of my publication "*The Cotton Supply Reporter*," containing your replies or communication.—I have the honor to be, &c.,

(Signed) G. R. HAYWOOD,
Secretary.

Manchester, December 1859.

P.S.—It is at the suggestion of Dr. Forbes Watson that we are forming this Museum.

PROPOSED QUERIES.

1.—Is the cotton plant cultivated in your district?
2.—What are the varieties?
3.—If the American variety grows in your district, when was it first introduced, and has its cultivation increased or fallen off?
4.—Can you give the statistics, *i. e.* the number of acres cultivated, and the annual amount of produce; also the yield per acre?
5.—Is it your opinion that the American plant in your district deteriorates in quality and staple each year, when preserved from admixture with other varieties?
6.—What is the peculiar nature of the soil and climate?
7.—Is irrigation employed in cultivation? If not, would irrigation improve the quality and increase the quantity, and is it available?
8.—What is the estimated quantity of clean cotton produced per acre; and what extent of ground could be devoted to its production?
9.—Can the cultivation be extended with facility?
10.—Are there obstacles to its cultivation, and of what nature?
11.—What is the probable consumption by the Natives; and what the quantity available for export?
12.—Are there any, and what merchants in your district, who are buyers of cotton from the grower, or who would buy cotton if produced? If not, what would be the necessary agency to employ to purchase the cotton and send it to England?

13.—At what probable price can it be purchased clean, either at the place of growth or at the port of shipment?

14.—What are the means of conveyance from the cotton fields to the port of shipment, and the cost per pound; and are they capable of being facilitated, and in what manner?

15.—Are the growers supplied with good seed; and would they attend to the cultivation of superior seed if supplied them?

16.—Are they furnished with other machinery than the churka for cleaning, or presses for baling the cotton; or in what manner is it packed for the market?

17.—What is the cost of cleaning cotton per pound, by the churka or other machine used?

18.—Can and will you favour us with samples of cotton grown in your district?

19.—It being important that seed of the American variety should be saved for re-sowing, in order to extend its growth, will you take steps forthwith to secure it in a pure and unmixed state, and undertake to disseminate or cause it to be disseminated on an extended scale over your districts, for re-sowing?

20.—Will you please furnish samples of cloths or goods made from cotton by the Natives, and state the cost of manufacture and the selling price?

21.—Will you furnish this Association with a printed or other statement of the extent of waste lands in your district, and also a sketch map of the same, on the smallest scale available?

22.—Will you favour the Committee with a detailed communication upon all the points referred to in the above questions, and generally offer suggestions as to the most effectual manner in which the trade and commerce of your district may be extended, giving special reference to cotton, as it is proposed to publish your letter, with your replies, in the "*Cotton Supply Reporter* (published by this Association), for the benefit both of the people of India and of this country?

Recommended,—That it is very desirable that every effort

should be made to secure the crop of cotton, which is grown from American seed, from being mixed or adulterated with inferior kinds; and it will be well to point out to the Native dealers the ultimate great advantage which will be gained by this step. That you endeavour to induce the Government to purchase the whole, or as much as possible, of the pure American seed, carefully selected from the best plants, for re-distribution; and in case that is impossible, that you will secure some for this Association, by placing yourself in communication with the Bombay Chamber of Commerce, who will inform you of the quantity required. I have also to direct your attention to the photograph of the relative staples of various cottons, and in order that the Native cultivator, trader, and others, may see exactly what the manufacturers of this country mostly require, you have forwarded herewith a sample of American cotton, showing the quality and length of fibre most in demand.

Cotton Gins.—If you had a number of cotton gins for cleaning cotton sent to you, could you obtain cotton in exchange for them; and would the Natives pay the cost, say £3 to £6? Please say what number, and at what price.

The Cotton Supply Association has held several competitive trials of cotton gins, which have led to the production of a simple gin on the Macarthy principle, which can be supplied as follows:—

D, price £3, turns out 52lb. weight of short-staple and 55lb. weight long-staple clean cotton in 10 hours per 1 man.
WW, price £1 10s., turns out 15lb. of short-staple and 24lb. long-staple clean cotton in 10 hours per 1 man.

The Committee cannot recommend the use of the saw-gin, finding that the saw-ginned Indian cotton is almost unsaleable in Liverpool, on account of the injury done to the fibre by the action of the saw, and never realises by ½*d.* to 1*d.* per lb. so much as when ginned by the Macarthy gin. They are of opinion, that although the Macarthy gin does not turn out so much clean cotton per day as the saw-gin, it would pay better to work an extra number of them, than to use the saw-gin under any circumstances. It is only a question of first cost. For cottage purposes, the Macarthy gin surpasses the Native churka. It does no injury to the staple, and will clean quite as much cotton as the ryot is

likely to produce. They cannot, therefore, too strongly condemn the use of the saw-gin.

The Committee beg to request the favour of your furnishing replies to the above questions, &c. at your earliest convenience.

(Signed) G. R. HAYWOOD,
Secretary.

N.B.—The Committee will feel much obliged by your forwarding a copy of these queries to any other gentleman who may be able to furnish similar information.

No. 33 OF 1860.

To G. R. HAYWOOD, Esq.,
Secretary Cotton Supply Association, Manchester.

DEAR SIR,—I beg to acknowledge receipt of your favours of 2nd November, 9th January, and 2nd ultimo, with sundry enclosures, all of which have had the attention of this Chamber.

The proposed queries to Collectors, with samples of American cotton, and photographs of staple, have been despatched to the several gentlemen indicated, and it is to be hoped that some new light may be thrown on the subject. These papers and samples appear to the Committee likely to keep public attention directed to the increased growth of cotton, and they think, therefore, that it would be desirable to furnish this Chamber with at least twenty more packets, for distribution to those who take an interest in the subject.

The cotton seed (26 barrels) arrived by the *Floating Light* has turned out in excellent condition, its germinating power being quite unimpaired. The seed has been applied for from numerous quarters, and has been distributed as per particulars annexed.

The Committee has not lost sight of the proposed undertaking of small cotton farms on account of your Association, and, if a suitable person can be found to superintend, they propose trying a small experiment on the line of railway now opened to the cotton district of Barsee. There is, however, only one barrel of seed remaining undisposed of, and considering that those to whom the seed has been delivered will

try its cultivation upon improved principles, it may, perhaps, be as well to defer active operations until the result of their experiments has been laid before the Chamber. The Committee feel that it would be highly desirable that the first experiment on account of your Association should be successful, and they fear that the principles lately enunciated have hardly been sufficiently tested to warrant absolute confidence in a favourable result. Mr. Robert Watson in Nagpore, Messrs. A. C. Brice & Co. in Canara, Mr. Lowry in Coimbatore, and others, propose trying the experiment of careful cultivation this season, and if successful, there is every reason to believe that the cultivation will be widely extended.

The last of the Government experiments has now been closed. Directions were given to Mr. Daley, of Dhundooka, in Guzerat, to try the experiment of early sowing of American seed at Gogo, Dholka, and Dhundooka, and about 40 acres were sown at each place, but unfortunately the seed was not got into the ground before August. The trials at Dholka and Gogo appear to have been total failures, but that at Dhundooka seems to give promise of a favourable result. Dr. Forbes, who has long paid great attention to this cultivation in Dharwar, is now in Guzerat, and will report upon these experiments; and as it appears proved that Government agency is not suited to the development of this description of industry, the Committee are of opinion, that in the event of the Government (as is probable) declining to prosecute further experiments of this kind, it might be desirable to make a further trial at Dhundooka, under the superintendence of the head writer at that establishment, and with this view the Chamber propose to offer to Government to pay part of the salary necessary to retain his services in the further carrying out of this experiment. The acclimated seed would then be re-sown, and there would be a greater prospect of success than with entirely new seed.

It is difficult to obtain any very decided opinion of the standing and respectability of Mr. Futtaychund Khemchund, to whom one of the gins was delivered; at all events he appears to take an interest in the object of your Association, and therefore deserves encouragement.

The Committee are endeavouring to procure samples of

the different descriptions of Native cotton goods, but they are of opinion that the Collectors to whom you have sent the proposed queries are better able to furnish what you require than this Chamber, whose members have little or no intercourse with the great marts of the interior, where the fabrics would be chiefly obtainable. When the railways are complete to any considerable places in the interior, the European mercantile community will doubtless find it their interest to make occasional excursions thither, but at present the speed of the lines is so low, the breaks so considerable, and the places reached of so little commercial importance, that it is felt that the loss of time would be in no way compensated by the meagre information obtainable.

Much surprise has been felt here at the extraordinary falling off in the consumption of East India cotton in Lancashire lately, notwithstanding its low range of value as compared with American; East India being now one penny per lb. lower than last year, while American remains almost unchanged. This circumstance is the more surprising when we consider the marked improvement in the quality of both the Native and American varieties that have gone forward last season from Bombay. Though the recent rise in freights, added to the low range of values in Liverpool, has not caused a proportionate fall in prices here, the losses to Native dealers and others are considerable, and it is to be feared that the growth of cotton in future seasons may be discouraged in consequence, and diminish the general supply available for your manufacturers. Under these circumstances, any information as to the causes of this dislike to East India cotton, and your views as to whether the objection is likely to be of a temporary or permanent character, will be of interest to the Chamber.—I remain, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 11th April 1860.

Distribution of Cotton Seed.

Commissioner of Scinde	5 barrels.
Robert Watson, Esq., Nagpore	5 „

A. C. Brice & Co., Canara	5 barrels.
Dr. Forbes, Dharwar	5 „
Capt. Davies, Berar	3 „
O. D. Clark, Esq., Asseerghur	1 „
Dr. Birdwood, Poona	Portion.
R. C. Rowlands, Esq., Bombay	„

Applicants for Sea Island Seed.

G. DeGacher, Esq., Oomrawuttee.
W. M. Hearn, Esq., Belgaum.

To the SECRETARY BOMBAY CHAMBER OF COMMERCE.

SIR,—I now enclose bill of lading of 20 barrels of New Orleans cotton seed mentioned in my letter to you of the 2nd instant.

Instructions have also been given for forwarding the 1 ton of Egyptian seed, stated in my last.

We are also preparing 20 hand gins for shipment to your Chamber,—10 of Dunlop's patent hand roller-gins, value £3 each, and 10 of Wanklyn's hand roller-gins, value 30*s.* each,—which the Committee trust will be approved by the Chamber as eminently suited to the wants of the Native grower.

The Dunlop gin gained the first prize of £20 at the recent trial held by this Association. Wanklyn's gin gained the £5 prize. The Committee will be glad to receive a report from your Chamber in reference to the suitability of these machines for India, and will feel obliged by your Chamber calling public attention to their merits.—I have the honor to be, &c.,

(Signed) G. R. HAYWOOD,
Secretary.

Manchester, 24th February 1860.

No. 86 OF 1860.

To G. R. HAYWOOD, Esq.,
Secretary Cotton Supply Association, Manchester.

SIR,—I beg to acknowledge receipt of your letter of 24th February, enclosing bill of lading of 20 barrels American

cotton seed, which has arrived in good order, but too late for distribution, on account of the setting in of the south-west monsoon, during which communication with the coast and interior is almost entirely suspended.

It is a remarkable fact, with regard to the last parcel of American seed, that on its arrival in March it was found by experiment to be perfectly sound, and its vitality remarkably active, almost every seed germinating in a few days after being sown; but when sown again in May, but a small portion came up, and produced only weak plants. The same result has taken place on the coast, where five barrels were sent. From other parts no accounts have yet been received. It would appear from this failure, that the duration of the active principle in the seed is limited to a certain definite range, beyond which it becomes useless. This circumstance may possibly account for the almost universal failures that have taken place with imported seed; and the Committee, with the view of enabling those who may be disposed to continue experiments to do so with the best prospect of success, have resolved to import a sufficient quantity of new Dharwar acclimated seed, and supply it to those who may apply for it.

These applications have been numerous this season, and it is much to be regretted, that from the circumstances above mentioned, there is every probability of the experiments proving failures, as has hitherto been the case.

The Egyptian Sea Island seed sent direct from Suez has turned out remarkably well, and from the coast we hear that almost every seed has germinated, and the plants are now from 1 to 2 feet high.

The Chamber will be glad to hear of the shipment of the hand roller-gins, about which there has been inquiry, but they fear the principle of the Macarthy gin, as stated in former letters, will not be found adapted to Native wants. They are curious to hear your opinion of Dr. Forbes's churkas, of which you will have observed that several of the members of the Chamber hold a high opinion, as admirably adapted to the use of the Natives.

Enclosed you will find copy of a letter referring to Mr. Futtaychund Khemchund, of by no means a flattering nature. We were afraid that the large ideas of this individual were hardly justified by his position amongst the Natives.

I have further to enclose original letters received from

L. H. B. Tucker, Esq., Collector of Rutnagherry, and from G. B. Seton Karr, Esq., Collector of Belgaum, in reply to the queries sent to them at your request several months past, and enclosed is receipt for the parcel of samples, sent by the latter gentleman.

I shall shortly wait upon you with a memorandum of expenses incurred on account of your Association.—I remain, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 7th August 1860.

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce, Bombay.

DEAR SIR,—We, the undersigned, have to inform you, that we are the principal owners and managers of our firm, and that Futtaychund Khemchund was once in our service, and, as such, doing such business on our behalf as we instructed him to do. In return for his services, he was allowed, as remuneration, Rs. 400 per annum out of the profits. In consequence, however, of certain tricks which he played with us in discharging the concerns of our firm, and which have lately come to light, we were obliged to dismiss him from our service; and we are informed that he has since been employed in the service of Kassim Natha.

We therefore request, if he comes to you in the capacity of our representative, or on our behalf, that you will have the goodness to refuse holding any conference with him in connection with the affairs of the Cotton Supply Association Society.

We further beg the favour of your requesting the Committee of Manchester to cease all communication with him on our behalf, and to write to our own address direct through your Chamber of Commerce, on the subject of the affairs of the Association.—We remain, &c.,

(Signed) WISSWAS RAO GOVINDJEE.
„ TRIMBUCKROW BHAWOO.

Bombay, 20th July 1860.

Replies to Queries.

No. 257 of 1860.

From L. H. B. Tucker, Esq.,
Collector of Rutnagherry,

To G. R. Haywood, Esq.,
Secretary Cotton Supply Association, Manchester.

Sir,—In reply to your circular of December last, I have the honor to inform you that no cotton is grown in the district of which I have charge.

2. The Rutnagherry Collectorate consists of a long narrow strip of land, lying between the sea and the great western range of Ghauts (mountains), which form its boundaries throughout its length. It extends from 16° to 18° N. lat., and lies between 73° and 74° E. long., the length being 160 miles, and the breadth averaging 35 miles.

3. It is an extremely hilly, rocky, and sterile country, intersected by numerous creeks and tidal rivers. Along these the only fertile soil is to be found, which is principally devoted to the cultivation of rice, and is not suited to cotton. Inferior grains are raised on the higher ground, wherever a little soil is to be found; but the produce is poor and scanty, and the cultivation shifts from place to place every year, as none of the upper lands admit of two years' consecutive tillage, and in most cases require many years' rest after yielding one crop. Waste lands, properly so called, there are none; every acre of productive soil being required to raise food for the dense population, which, as it is, has to depend largely on imported grain.

4. Under these circumstances, no hopes can be held out that the cultivation of cotton will ever be introduced here. —I have the honor to be, &c.,

(Signed) L. H. B. Tucker,
Collector.

Rutnagherry, Collector's Office, 5th April 1860.

Answers to the Queries put by the Manchester Cotton Supply Association in the paper which accompanied their Letter of December 1859.

1. Cotton is cultivated in the most of the districts of the Belgaum Collectorate.

2. Last year 287,942 acres were sown with indigenous, and 1,977 acres with New Orleans cotton. A small quantity of Egyptian seed was sown experimentally, and failed.

3. The American variety was, I believe, first introduced into this Collectorate about A. D. 1840. Its cultivation has fallen off.

4. The number of acres cultivated with cotton for the year 1859-60 is 289,920. The annual amount of produce is about 53,526 candies (784lb. avoirdupois make one candy). The yield per acre varies from 50 to 300lb. per acre. A fair average is 150lb.

5. The American variety does not appear to me to deteriorate, either in quality or staple.

6. Cotton is generally sown in good black soil. The climate is moister than in most other parts of the Deccan.

7. Irrigation is not employed. It has often been tried experimentally on a small scale, and the result has been unfavourable.

8. See answer No. 4. About one-fourth of the weight of the cotton gathered is the yield of clean cotton—say from 30 to 50lb. per acre. About 400,000 acres of land in this Collectorate are capable of producing cotton. Some other kinds of produce, however, pay better than cotton.

9. The cultivation could be extended without difficulty. A considerable rise in the price of cotton would cause an increase of cultivation.

10. There are no obstacles to its cultivation.

11. The probable annual consumption of cleaned cotton by the Natives may be estimated at about 6,420 candies, and the quantity available for exportation about the same.

12. The growers generally sell their cotton to dullals (middle-men), by whom the merchants are supplied. The mercantile houses in Bombay employ Native agents to make their purchases, and by means of these persons the whole produce of the country might be swept up without any difficulty.

13. At the place of growth, clean cotton usually fetches Rs. 2 to Rs. 2½ per maund of about 25lb. The price at the port of shipment can be ascertained from the columns of any of the Bombay local papers.

14. Cotton is usually conveyed from the place of growth to the port of shipment in carts, or on pack-bullocks. I calculate roughly that the cost of the former mode of carriage is about one farthing per pound. More roads are required, but in consequence of the increasing traffic of the country, and the increasing demand for carriage, I am disposed to think that under any circumstances the cost of conveying cotton from the interior to the port of shipment will rise.

15. The growers have plenty of good indigenous seed, and generally prefer it to foreign seed. If superior seed were supplied gratis, I think they could be induced to sow it.

16. All the cotton in this Collectorate is cleaned by common foot-rollers. There are no presses for baling; it is packed in coarse gunny bags, which are suspended with strong ropes, and as the cotton is weighed and thrown into these bags, it is trodden down by men standing in them.

17. One man can clean a maund of cotton by a foot-roller in a day. His pay for that is one anna, and at that rate the cost of cleaning is about one farthing for four pounds.

18. I enclose samples of cotton as follows:—

1,	Indigenous cotton from	Purusghur.
2,	Egyptian ditto	ditto.
3,	American ditto	ditto.
4,	Indigenous ditto	Bedee.
5,	ditto ditto	Sumpgaum.

19. Official interference is not likely to be attended with any beneficial result. I would recommend the Cotton Supply Association to employ private agency.

20. I enclose samples of cloth made from cotton by the Natives, with the selling prices attached. The cubit (see the labels on the samples) here is the length of a man's arm from the point of the elbow to the tips of his fingers.

21. The waste lands are scattered over the whole district. There is no large extent of good unoccupied cotton land in one place.

22. I regret that my ordinary official duties occupy my

time so entirely as to place it out of my power to submit to your Association a report on so wide a subject as the general trade and commerce of the Southern Mahratta Country. I enclose answers, however, to the 21 questions above referred to, from my First and Second Assistants, Messrs. W. D'Oyly and H. Erskine, of Her Majesty's Bombay Civil Service, which will supplement the information I have now had the pleasure of affording; and I append, also, some remarks on the trade and commerce of Belgaum, which have been drawn up by one of my Native officers.

(Signed) G. B. SETON KARR,
Collr. & Magistrate Belgaum, and Pol. Agent S. M. C.
Belgaum, 10*th July* 1860.

No. 37 OF 1860.

1. Yes.
2. Country cotton and American.
3. The cultivation has fallen off. American cotton is grown in any quantity only in the neighbourhood of Roan. It was introduced some years ago,—I have not been able to ascertain the exact year.
4. 143,996½ acres. The yield per acre is from 10 to 12 maunds or 240 to 288lb. (1 maund = 48 seers, 1 seer = 20 Rs. weight).
5. Probably not, but it is very much mixed with other varieties.
6. Rich black soil; Deccan climate; light monsoon from June to October, with occasional showers in November.
7. No. It is not available without outlay, and at present prices would be less remunerative than other irrigated crops. It is doubtful whether it would improve either the quality or quantity of the cotton.
8. About one-fourth of the weight of the cotton gathered is the yield of cleaned cotton, viz. from 2½ to 3 maunds, or from 60lb. to 72lb. per acre (*vide* 4). About 30,000 acres of cotton land is uncultivated.
9. The above 30,000 acres might be brought under cultivation, but it would probably be found to consist principally of outlying fields, and there might be difficulty in procuring labour.

10. Suitable land is the only limit, but prices must alter before cotton can be substituted to any great extent for the ordinary crops.

11. One-fourth of the produce is probably consumed on the spot, and three-fourths exported.

12. There are Native merchants on the spot, who buy cotton to any amount for exportation.

13. Clean cotton varies from Rs. 2 to Rs. 3½ per maund on the spot, or about 1⅝*d.* to 3⅛*d.* per pound.

14. On bullocks, or in carts; the cost varies from annas 5 to 7 per maund, or between ¼*d.* and ½*d.* per pound. There are no obvious means of facilitating the transit to the coast; the roads are good. The railroad will probably eventually take most of the cotton from the Hoongoond Talooka.

15. There is plenty of good Native seed to be had. The cultivators are not fond of trying experiments with new varieties.

16. There are two cotton gins in the Badamee Talooka, in working order; no presses. The cotton is packed in "tut" or gunny bags.

17. The cost of cleaning cotton by hand is 3 annas for 1 maund of clean cotton, or 1½*d.* for 8lb.; ginned cotton, 9 pies per maund, or about 1*d.* for 24lb.

18. Forwarded (by banghy).

19. Official interference of this nature is not likely to be attended with any beneficial result.

20. Forwarded (by banghy).

21. The waste land is scattered over the whole district; no large amount of waste or cultivated land is to be found in one spot.

22. European agency established on the spot for the purchase of cotton would increase and improve the supply, by raising the prices, and giving a premium to the better staples.

The Native merchants are apt to combine to keep down the prices, and do not give sufficient encouragement to careful cultivation, cleaning, &c. by giving advanced prices on the better samples.

At the same time, it is impossible to assert that such an agency would be remunerative; it would have to withstand the combination of the Native merchants, who are creditors of many of the cultivators, and so have them in their power.

Few Europeans are qualified to undertake such an agency; familiar knowledge of Canarese is the first essential, besides great tact in the management of Natives.

No one will at present take any of the Macarthy gins.

(Signed) W. D'OYLY,
First Assistant Magistrate.

Kulladghee, 6th June 1860.

No. 28 OF 1860.

To G. B. SETON KARR, Esq.,
Collector and Magistrate, Belgaum.

SIR,—I have the honor to offer the following remarks on the subject referred to in your letter No. 303, dated 27th of March last:—

2. It seems unnecessary to enter into any detail regarding the cotton producing parts of these districts, and previous experiments in them, as all this has already been published in far greater detail than I could give it, in the summary of proceedings connected with the cotton experiments in the Southern Mahratta Country, published by Government in the year 1849.

3. All details regarding the districts under my charge may be found from page 106 to page 114 in that publication, and I shall therefore now answer as briefly as possible all questions not disposed of in those pages.

Question 1.—Is the cotton plant cultivated in your district?

4. Yes, to a considerable extent, in the Purusghur and Sumpgaum districts, and a little in the western or Bedee districts.

2. What are the varieties?

5. The common cotton of the country is almost exclusively sown, all other varieties having, according to the cultivators, proved failures. This year there are a few acres in the Purusghur Talooka planted with American, and a few with Egyptian cotton.

6. The American cotton has been planted in all the districts under my charge, but has not proved successful; and now there are only, as above stated, a few acres planted with it in the Purusghur Talooka.

3. If the American cotton grows in your districts, when was it first introduced, and has its cultivation increased or fallen off?

7. It was introduced into the Purusghur and Sumpgaum districts in the years 1846 and 1847. The greatest amount ever sown was in the year 1847, when 2,553½ acres were planted in the two districts.

8. The district officer of Bedee reports that, in 1834, a Mr. James took some land in that district, for the purpose of experimenting with American and other descriptions of cotton, but that he soon desisted, finding it did not answer. I have no records showing the results of his experiments.

9. The number of acres planted with cotton last year was about as follows:—

4. Can you give the statistics, *i.e.* the number of acres cultivated, and the annual amount of produce, also the yield per acre?

	Acres.	g.
In Purusghur	44,078	4
In Sumpgaun	13,842	22
In Bedee	320	23

10. The supposed yield of uncleaned cotton is stated to have been about 31,804 nuggs, viz.—

The nugg in different districts varies. I am now referring to that used in Sumpgaun, viz.—
20 tolas = 1 seer.
56 seers or 28lb. = 1 maund.
8 maunds = 1 nugg.

	Acres.
In Purusghur.....	24,684
In Sumpgaun.....	6,921
In Bedee	199½

11. The yield per acre of course varies considerably, according to the nature of the soil. The best land gives about 1 nugg or 224lb., while in some parts of Bedee it is said to be as low as 50lb; a fair average is, I believe, considered to be about 6 maunds, or 130lb.

12. The American variety appears, both from the accounts published, and from the statements of the cultivators, to be unsuited to these districts.

5. Is it your opinion that the American plant in your district deteriorates in quality and staple each year?

13. The soil in the Purusghur or most eastern districts

is a rich black soil ; that in the others is more mixed with sand, red soil, &c. I am unable to give details as to the composition of the different soils.

6. What is the peculiar nature of the soil and climate ?

14. The climate is good for India, the heat not being so excessive as in many other parts. There is a great deal of rain in the western parts of the districts, near the Ghauts, but not a very heavy fall in the eastern. The range of the thermometer in a good tent at mid-day is from about 78° to 100° Fahrenheit.

15. Irrigation is never employed in the cultivation of cotton. It has been often tried, but it is said to injure, not improve the crop.

7. Is irrigation employed in cultivation? If not, would irrigation improve the quality and increase the quantity, and is it available ?

16. There are in many places facilities for irrigation, and the cultivators avail themselves of these opportunities largely when cultivating crops that are benefitted thereby. A considerable portion of the land planted might be irrigated.

17. In the Purusghur and Sumpgaum districts the amount of cleaned cotton obtained per acre is said to be from 30lb. to 50lb. In the Bedee district it is somewhat less.

8. What is the estimated quantity of clean cotton produced per acre, and what extent of ground could be devoted to its production?

18. The total amount of land in these three districts fit for cotton cultivation is about 138,600 acres. The whole of this could never be given up at one time for cotton ; a large portion would always be required for jowaree, grain, oil-seeds, &c. for local consumption, and as fodder for the numerous cattle. Almost all land suitable for cotton is at times planted with it. A considerable increase on the present area (58,243 acres) planted with cotton might, however, be expected, were its cultivation more profitable.

19. This is a mere question of supply and demand. If the cultivators found cotton remunerate them better than other descriptions of produce, they would at once extend the cultivation. As it now is, however, the sale of their cotton at remunerating rates, if any very large

9. Can the cultivation be extended with facility ?

quantity is planted, is too uncertain to induce them to stand the risk, while they are certain of an equal if not greater profit on almost any other crop.

20. I am not aware that there are any obstacles to its cultivation.

10. Are there any obstacles to its cultivation?

21. The estimated yield of cleaned cotton last year was 11,036 nuggs; of this, about 4,000 nuggs was, it is said, kept for local consumption, and about 7,036 nuggs exported.

11. What is the probable consumption by the Natives, and what the quantity available for export?

22. There are many Native merchants who buy from the cultivators, some for the purpose of exporting it, and others to re-sell it to the Native dealers in the large towns who purchase for exportation. These men would, I imagine, at all times be ready to act as agents for any firm wanting purchases made, or to buy on their own account any amount they thought they could re-sell with profit. European agency is not, so far as I am aware, now employed, and it would, I should think, be much more expensive than Native, though, of course, it would possess, in other ways, many advantages.

12. Are there any and what merchants in your district who are buyers of cotton from the grower, or who would buy cotton if produced? If not, what would be the necessary agency to employ to purchase the cotton and send it to England?

23. If I am not mistaken, within the last few years more than one European house has had dealings in these and the neighbouring districts. Messrs. Ritchie, Steuart, & Co., and Brice & Co., both, I believe, have had agents in the Southern Mahratta Country, and could, I should therefore suppose, give any information on the points that might be wanted.

24. Last year, in the Purusghur and Sumpgaun Talookas, the price per nugg varied from Rs. 28 to Rs. 36, and in Bedee it seems to have been much the same. I am unable to give any particulars regarding the price at the ports of shipment.

13. At what probable price can it be purchased clean, either at the place of growth or at the port of shipment?

25. The greater part, indeed almost all the cotton, is conveyed to the coast on carts, and the cost of carriage for this method of conveyance is reported to be about two pies or a farthing

14. What are the means of conveyance from the cotton fields to the port of shipment, and the cost per pound; and

are they capable of being facilitated, and in what manner?

per pound from the Purusghur district, and one and three-quarter pies from the Sumpgaum and Bedee districts.

26. The two ports of shipment to which cotton is sent are Coompta and Vingorla. The road to Coompta is a fair one, but the Ram Ghaut, on the Vingorla line, can only by courtesy be called a "road." It is excessively steep, and several parts of it resemble more a series of break-waters than anything else.

27. Were the existing roads improved, or was the Parpoolee Ghaut line, by which the Ram Ghaut would be avoided, completed, traffic would undoubtedly be much facilitated, as there is at present always at least one day's delay at the Ram Ghaut.

28. The Parpoolee Ghaut, which had been commenced in 1856-57, was, unfortunately, one of those public works which were temporarily stopped by the mutinies, and it has not since been recommenced. There are several other lines, which, if improved, would probably tend to develop the trade; as, for instance, the line over the Mangelly Ghaut to Vingorla, and the Chorla Ghaut to Goa; but perhaps the line which would be of use more than all others to any persons desirous of commencing a traffic from the port of shipment direct to England, would be that to the port of Sudashewghur, at the mouth of the Kala Nuddee, a port which has, I believe, been highly approved of by high naval authorities, and which would admit of the entrance and lading of ships of large tonnage, which is not the case with any other port on this part of the coast. An estimate has been formed of the outlay necessary to open up this new line, and it appears that for but a small sum all that is necessary to make it fit for traffic could be accomplished.

29. What would, however, more than all tend to develope trade, would be the making of a railway through these rich districts, &c. I trust the day is not very far distant when a branch from the line now under construction to Sholapore may run through these and the Dharwar cotton-growing districts. Of its success as a paying speculation, I should think there could not be a doubt; and it would also be invaluable for military purposes.

30. The growers are supplied with good seed of the indigenous cotton plant, and all at present express themselves unwilling to try any further experiments with the American seed. This is purely the result of previous failures, and not from any want of enterprise on the part of the cultivators, as I have clearly seen from the general willingness with which they have lately agreed to plant, as an experiment, the *sorgho sucri* seed lately provided by Government. In many instances, they have eagerly asked for this seed, and had I had much more I would have found no difficulty in getting it planted.

15. Are the growers supplied with good seed, and would they attend to the cultivation of superior seed if supplied them?

31. All the cotton produced in these districts is cleaned by foot-rolling. There are no machines of any sort in use for this purpose. Indeed, with the exception of a new machine lately invented by Dr. Forbes, of Dharwar, and which he calls a churka-gin, I have seen no machines which can be used for cleaning Native cotton. Should he succeed in bringing his ingenious adaption of the common foot-rolling churka to perfection, it will prove invaluable in these districts, and will, by reducing the charge for cleaning, cheapen cotton greatly in these parts.

16. Are they furnished with other machinery than the churka for cleaning, or presses for baling the cotton, or in what manner is it packed for market?

32. There are no presses for baling cotton. The present method of packing is to press down the cotton into large bags by jumping upon it.

33. The cost of cleaning cotton by the churka is from a quarter to half a pie a pound.

17. What is the cost of cleaning cotton per pound by the churka or other machine used?

34. I herewith send samples of the different varieties of cotton from each district, viz.—

18. Will you favour us with samples of cotton grown in your district?

1 packet of American cotton.
1 do. of Egyptian.
1 do. of indigenous.

35. As I have not been authorised to make the expenditure necessary to enable me to supply samples of cloths or

goods made from cotton by the Natives (*vide* question 20), I am unable to do so.

36. The total amount of waste lands in the districts upon which I am reporting is acres 71,127. The greater portion of this is either covered with jungle, or consists of rocky hills unfit for cultivation. There is but little good land waste, and what little there is, is in detached fields, scattered over the face of the country. It is not in my power, under these circumstances, to provide, as requested in your 31st paragraph, a map showing the waste lands. One thing, however, is certain, that there is no place where any large amount of land fit for planting cotton, oil-seeds, &c., could now be procured. The worst fields have naturally been left the longest waste, but even these are now being quickly taken up, and in a few years there will scarcely be a waste field anywhere except where the soil is so bad that the cultivators see little chance of profit.

37. In the foregoing remarks, I have answered as briefly as possible the questions forwarded by you; and I now refrain from further details, as it appears to me, from the questions put, that the Cotton Supply Association are more anxious for particulars regarding the American description of cotton than of that common in these districts, and as the details of all previous experiments regarding the different species of cotton planted in these districts, as also regarding presses, &c., can be found at length in the publication referred to in my 2nd paragraph, with which, I imagine, the Cotton Supply Association are familiar.

38. To enable you to see at a glance the extent of these districts, their cultivable area, the area fit for cotton cultivation, the amount so planted, and some of the other principal details asked, I append a statement, which may be useful.—I have the honor to be, &c.,

(Signed) H. ERSKINE,
Second Assistant Collector & Magistrate.

Kittoor, 4th June 1860.

Statement showing the Area, Culturable Area, Amount of Cotton Grown, Amount Exported, Price of Cotton, &c. &c., in the Parusghur, Sumpgaum, and Beedee Talookas.

NAMES OF TALOOKAS.	Area of Talookas.	Culturable Area.	Number of Acres under Cultivation.	Number of Acres of Arable Land now Waste.	Waste Land fit for Cotton Plants.	Total Number of Acres fit for Cotton Cultivation.	Acres now planted with Cotton.	Yield of Cleaned Cotton from Land in Column 8.	Amount probably required for Local Consumption.	Amount probably available for Exportation.	Yield per Acre.	Price per Nugg of 224lb.	Cost of Cleaning a Nugg.	Market Price of One Nugg of Cleaned Cotton.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	A. g. a.	A. g. a.	A. g. a.	A. g. a.	A. g. a.	A. g. a.	A. g. a.	Nuggs. g. a.	Nuggs.	Nuggs.		From	Rs. a. p.	From
Parusghur	389,833 11 2	328,630 19 1½	313,645 21 9½	14,984 37 8	50 0 0	88,000 0 0	44,078 4 0	9,256 0 0	3,085	6,191	From about 1 Nugg to 6 mds.	Rs. 5 8 0 to Rs. 4 0 0	0 6 8½ to 0 8 0	Rs. 22 0 0 to Rs. 18 0 0
Sumpgaum	208,663 30 14	181,641 9 6	173,646 16 6	7,994 33 0	.....	47,652 32 0	13,842 22 0	1,730 0 0	865	865	Ditto			
Beedee	462,681 19 12	243,271 38 12	195,124 0 12	48,147 38 0	.....	3,000 0 0	322 23 0	50 0 0	50	.....	From about 1 Nugg to 4 mds.	Rs. 6 0 0	0 9 4	Rs. 24 0 0 to Rs. 20 0 0
Total.....	1,061,178 21 12	753,543 27 3½	682,415 38 11½	71,127 28 8	50 0 0	138,652 32 0	58,243 9 0	11,036 0 0	4,000	7,036	.....	.....	.....	.....

(True copies)

(Signed) G. B. SETON KARR,
Collector and Magistrate Belgaum, and Political Agent S. M. C.

(Signed) H. ERSKINE,
Second Assistant Collector and Magistrate.

Memorandum containing some Remarks on the Trade and Commerce of Belgaum, by Mr. Anunt Bullal, Head Translator to the Political Agent S. M. C.

THE Cotton Association Committee desire suggestions as to the most effectual manner in which the trade and commerce of the Belgaum districts may be extended, especially with reference to cotton.

Sound education of the commercial, and elementary education of the agricultural, classes of the people should be insisted on. The present standard of knowledge of the former is so low, that they hardly know more than to scribble. The majority of the agricultural people do not possess even that much. In such a state of ignorance, we are not justified to expect them to thoroughly comprehend the multifarious advantages of commerce, which is the base of prosperity of a country. Our generous Government has been striving hard for their education, and will, I confidently hope, succeed in half a century to see a desire springing in them of entering on commercial enterprises.

To a man who has seen this Zilla, it is evident that its trade and commerce are not in due proportion to its resources. This is chiefly owing to indolence, apathy to leave homes, and fear to invest the whole of their available funds in commerce. To eradicate these defects, sound education alone will be able; but this is, as I have said above, a work of time.

In the mean time, we must be content with doing what we can for the extension of commerce, by persuasion, encouragement, and the removal of such difficulties in the way of the people as can be readily removed.

As the people, however, may misinterpret the direct interference of Government in such matters, it would be advisable to withhold it as much as possible. The Association had better take the lead. They should depute well-informed and agreeable Natives, knowing the language of the country, to the commercial towns of Nundghur, Belgaum, Chikoree, Neepanee, Tasgaum, Uthoree, Bagulkote, Purusghur, and Gokak, to hold communication with the principal merchants and agriculturists thereof, with the view of giving them salutary advice in commercial matters, whenever it is needed.

The duty of these agents should be extended to the introduction of Europe manufactured or improved implements of agriculture, as well as cotton-pressing, baling, spinning, and weaving machines, which the Association should try to bring in use in the districts at their own cost at first. When the people see the superiority of the introduced implements over their rude ones, they will readily endeavour to imitate them. The agricultural class should be incited to produce superior indigenous cotton, and to extend its cultivation, as well as that of the exotic one. The people do not properly know to rear up the latter, and, consequently, the labour foolishly expended on it, instead of proving remunerative, entails a loss on them; hence the general dislike displayed by them to the cultivation of the exotic cotton.

If the agents of the Association be vested with the authority of advancing loans to those people whose cotton crops may fail, not for want of care and attention on their part, but on account of natural causes, they will be induced, by the grant of such loans, to try again the exotic cotton cultivation. If, after repeated experiments, it be found that to this cotton this clime is not congenial, then only its cultivation may be given up as hopeless. Until that question be decided, the improvement and extension of the cultivation of the indigenous cotton should be insisted on.

The soil of this district being very rich, yields plenty of grain of all kinds, without subjecting the cultivators to so much trouble as is experienced in the Konkun.

As the grain is exported to a great extent, and almost wholly supports the Southern Konkun, the cultivation of cotton should not be allowed to extend so far as to affect its necessary supply for the consumption of this district, as well as its fostered Konkun.

For the speedy conveyance of goods, especially cotton, from this district to the ports of Coompta and Vingorla, railroads will be exceedingly useful. The present financial state of the Government will not, however, permit of their being opened immediately. In lieu, therefore, the present roads should be improved as much as possible, and new ones be made.

The route *via* the Ram Ghaut is so harassing, that many merchants hesitate to transmit their merchandise by it for shipment at Vingorla. Owing to its steepness, many acci-

dents occur to the cart bullocks, and drivers, in ascending and descending it. This route, in my humble opinion, should be altogether dispensed with, and routes by the Tulkut and Parpoolee or Ambolee Ghauts, which are shorter cuts, should be immediately opened. Both of these Ghauts are gentle slopes, and are much desired for easy communication between this district and the Vingorla port.

This district will be glad to avail of another port at Waghotun, in the Rutnagherry Collectorate, if a road be made from Belgaum, *via* Ajre, to meet that from Kolapore to that port.

(Signed) ANUNT BULLAL.

Belgaum, 9th July 1860.

To H. BROOKE, Esq.,
Secretary Chamber of Commerce, Bombay.

SIR,—By this time you will have received from our agents in Liverpool the twenty cases of cotton gins referred to in my last letter. We have now despatched twenty more of the smaller (Wanklyn's) gins to our honorary agents, Messrs. Peel, Cassels, & Co., of Bombay. I had hoped by this time to have been able to report to you in reference to Dr. Forbes's new gin, the improved churka, but it will be two or three weeks before the trial of it will take place. We shall publish a report of the trial, when I will forward copies of the same to your Chamber. Should it prove to be such a machine as, from examination, I think it is,—effective, economical in working, and cheap in construction,—it will be an invaluable acquisition. It has the great advantage of being a *churka*, and, as such, will enlist the *amour propre* of the Native Indian in its favour. I hope some steps will shortly be taken to get cotton from India, upon a new system. There is every probability of a company being formed for the purpose, based upon the principles you will see advocated in the *Cotton Supply Reporter* of the 15th instant.

I shall forward as speedily as possible the additional packets of cotton samples you require. I trust that the distribution of seed reported by you will lead to valuable results.

Our Committee will be glad to hear when your Chamber has decided as to an experimental farm. I also note your reference to the Government experiments. Should you be able to procure samples of Indian manufactured goods, or yarns, from the new mills, I shall be glad to exhibit them in our Museum. The falling off in the consumption of Indian cotton is by many accounted for from the increase in stock in Liverpool this year of low-class, adulterated American. Saw-ginned Indian cotton is not likely to find a ready market, from the injured condition of the staple. The only means of raising the character of Indian cotton in our market, is to pay more attention to the cleaning and packing. Judging from samples of cotton handed to us by Dr. Forbes, grown in Dharwar from American seed, and also from samples Nos. 40, 26, 27, and 38, referred to in the enclosed valuation, and which were forwarded to this Association by C. Davidson, Esq., of Hydrabad,* it is quite clear, that India *can* supply cotton *equal* to, and in some respects *superior* to America. The question is, "Why do we not receive such cotton in Liverpool?" The only answer we have yet had given to this question is,—that it is not the merchant's business to look so much to the *quality* and *condition* of the cotton he ships, as to the *price*. To secure himself as far as possible against loss on his shipments, he buys low-priced cotton; hence the inferior reputation of Indian cotton in our market. To remedy this, means must be devised for buying (under European supervision) the best qualities of cotton, from the cultivator, at the place of growth. Europeans must superintend the cleaning, and packing, and shipment direct to this country. With this view, an effort is now making here to form a company, with sufficient capital for this purpose. They will probably commence in Dharwar, and afterwards operate in other districts of India. It is believed that this is the only way to overcome the difficulty. I shall keep you informed as to the progress that is made towards the carrying out of the objects of the promoters of this company.

Hoping shortly again to communicate with you,—I am, &c.,

(Signed) G. R. HAYWOOD,

Manchester, 17th August 1860. Secretary.

* See report and printed copy of Mr. Davidson's letter, &c., herewith.

To the SECRETARY COTTON SUPPLY ASSOCIATION,
Manchester.

(Civil Department.)

SIR,—With reference to my letter (No. 813) of the 17th May 1859, I have the honour to forward to you, for the information of the Association, copy of a report made by me to the Government of India, regarding the results of the experiments tried in the Hydrabad territories in the culture of exotic cotton.

2. Appended to the report in question is a list of the samples of cotton forwarded to the Government of India, duplicates of some of which have already been transmitted to you by the district officers, through the firm of Messrs. Robert Strong and Co., of Bombay ; duplicates of those specimens which have not been forwarded to you have now been despatched to Messrs. Robert Strong and Co., for transmission to your address overland.—I have the honor to be, &c.,

(Signed) CUTHBERT DAVIDSON,
Resident.

Hydrabad Residency, 25th May 1860.

SIR,—With reference to paragraph 36 of my letter dated the 18th May 1860, to the Secretary to the Government of India in the Foreign Department, a copy of which was forwarded to you with my communication No. 772, of the 25th idem, I have the honor to intimate the despatch to your address, care of Messrs. Robert Strong and Co., of Bombay, of a parcel containing specimens of cotton grown in the Dharaseo district, received from the Deputy Commissioner of that division.

2. Sample No. 1 is from Egyptian cotton seed sent to the districts in January 1858, and the crop has been two years in the ground.

3. Sample No. 2 is from seed obtained from the above crop last year.

4. Sample No. 3 is from the New Orleans seed received from your Association in May 1859.

5. The proportion of cleaned cotton to seed, the Deputy Commissioner reports, is as follows :—

No. 1	1	10-11
No. 2	2	1-21
No. 3	1	17-23

and the produce per acre of cleaned cotton—

No. 1	107 lb.	11	oz.
No. 2	44 „	13	„
No. 3	26 „	13	„

I have the honor to be, &c.,

(Signed) CUTHBERT DAVIDSON,
Resident.

Hydrabad Residency, 1st June 1860.

From Lieutenant Colonel DAVIDSON,
Resident at Hydrabad,

To CECIL BEADON, Esq.,
Secretary to the Government of India,
Foreign, Department, Fort William.

(Civil Department.)

SIR,—I have the honor to submit, for the information of the Government of India, a report of the trials made in the culture of exotic cotton in the Hydrabad Assigned Districts since the date of my report (No. 212) of the 18th November 1857, on the same subject.

2. I regret exceedingly that the experiments on exotic cotton in these districts may be considered a failure up to the present time; but I shall direct that the trials be still proceeded with.

3. In regard to the cotton gins received from the Manchester Cotton Supply Association, on which I had promised to furnish the Government with a report in my report on the administration of the Hydrabad Assigned Districts for the year 1858-59, it is clear to me that the Natives of India neither understand their adjustment, nor how to use them: to which may be fairly attributed the want of success that has attended the experiments made with them.

4. I now proceed to report on the several supplies of exotic cotton seed received from the Government of India or from other sources during the period under review.

Supply No. 1.
Egyptian cotton seed, received from Calcutta on the 26th December 1857.

5. On the 8th of July 1857, the Government of India intimated to the Resident that the Secretary to the Bengal Chamber of Commerce had been requested to forward to Hydrabad fourteen cases of Egyptian cotton seed, and directed that the seed should be fairly tried in this province, and the result reported for the information of Government.

6. This supply was received at Hydrabad on the 26th December 1857, and despatched to the Deputy Commissioner in the Hydrabad Assigned Districts on the 4th January following.

Supply No. 2.
Egyptian cotton seed and Brazilian cotton seed, received from Calcutta on 9th March 1859.

7. On the 31st December 1857, the Government of India advised the Resident that the Superintendent of Marine had been instructed to forward to Hydrabad 4½ bags of Egyptian, and one of Brazilian cotton seed, for experimental culture, and requested that a report of the result of the sowings of this supply also should be submitted for the information of Government.

8. This supply did not reach Hydrabad till the 9th of March 1859, and it was despatched to the district on the 11th of the same month.

Supply No. 3.
New Orleans cotton seed, received from Dharwar in Aug. 1858.

9. In March 1858, at the suggestion of Captain Meadows Taylor, then Deputy Commissioner of West Berar, the Commissioner of the Hydrabad Assigned Districts recommended to the Resident the purchase of 10,000lb. of seed of the New Orleans cotton grown at Dharwar, which it was stated could be procured for 772 rupees 8 annas, inclusive of carriage to Hydrabad. The Resident sanctioned the measure, but the seed was not received in the district till September 1858, too late for a satisfactory experiment that season. A small quantity, notwithstanding, was distributed in West Berar to each Tehsildar, for trial.

10. On the 16th June 1858, the Secretary to the Manchester Chamber of Commerce solicited the Resident's

assistance in the extension of the cultivation of exotic cotton in the Nizam's territories and the Hydrabad Assigned Districts, and promised to send some of the best New Orleans cotton seed, and the most approved gins for cleaning cotton, and requested to be informed what quantity of seed and number of gins would be required.

11. The Resident expressed his willingness to further the views of the Manchester Cotton Association, and asked to be supplied with 3,900lb. of New Orleans cotton seed, and ten gins. He, at the same time, recommended that the seed should be sent so as to reach Bombay by April, or early in May, with a view to its being distributed throughout the districts by the beginning of June.

12. This supply of seed, with ten of Macarthy's cotton gins, was despatched by the Manchester Cottorr Association in November 1858, and was received in the district in May 1859.

Supply No. 4. New Orleans cotton seed, received from England in May 1859.

13. Of the Supply No. 1 of Egyptian cotton seed received from Calcutta, and sent into the districts in January 1858, the Officiating Deputy Commissioner of East Berar reports that a portion of the seed was tried in a garden at Mursee, but the plants, though irrigated, withered a few days after they had sprung up; that another small quantity was tried by the Deputy Commissioner himself in his garden at Hingolie, but it likewise failed—only one or two seeds sprouted, and then died off. Other trials were also made, but, as a general rule, afforded no good result.

Experiment with Supply No. 1, in East Berar. Egyptian cotton seed.

14. The report from West Berar, of the sowings of the seed from this supply, show that the trials there also ended in a similar result.

Experiment with Supply No. 1, in West Berar. Egyptian cotton seed.

15. The Deputy Commissioner of the Dharaseo district states, in regard to the experiments tried with this seed in his division, that from the reports received by him from the Tehsildars, the plants died when they were a few inches high; but that trials made by himself in his garden were never successful. That about three-tenths of an acre was sown, but, probably from the seed being old, did not come up very regularly; but

Experiments with Supply No. 1, in the Dharaseo district. Egyptian cotton seed.

the bushes were healthy, and attained a height of from four to five feet. The produce in cleaned cotton was 31lb., which gives about 100lb. to an acre; that the crop would have been larger, had the plants come up regularly. The soil is stated to have been a deep rich one, thrown up by a river, and was manured. Half the crop was watered several times, but there did not appear to be any material difference between the irrigated and unirrigated plants. The proportion of seed to cotton was about two to one. The cotton plants were left in the ground, and the produce in the year 1859 promised to be larger than that of the preceding year. Some of the seed grown in 1858 was sown at the commencement of the monsoon in 1859; and, in consequence of its being fresh, the whole of it germinated. The plants were about two feet high, and the crop promised to be a good one. The Deputy Commissioner promised a further report regarding the sowing of 1859, and forwarded a sample of the cotton grown in 1858, which sample is herewith submitted.

Experiments with Supply No. 1, in the Raichore Doab. Egyptian cotton seed.

16. The report from the Raichore Doab shows that the results of the sowing of this supply in that district has not been satisfactory.

Experiments with Supply No. 2, in East Berar. Egyptian and Brazilian cotton seed.

17. In regard to the Supply No. 2, of Egyptian and Brazilian cotton seed received from Calcutta, and sent to the districts in March 1859, the Deputy Commissioner of East Berar reports that the two descriptions of seed reached that district in good order about the commencement of the monsoon; that ground had been prepared in different localities, and of different descriptions, so that every precaution had been taken for ensuring the seed a fair trial on its arrival. He states that the result, he has no doubt, would have been more favourable, had the seed reached the district a month earlier.

18. The monsoon rains, he observes, had set in early, and at first the season promised to be a favourable one, but the seed did not reach till after the first fall of rain. Long breaks in the monsoon took place, and the crops, from want of sufficient moisture, did not attain their average size—the cotton, generally, being more than usually stunted.

19. The Brazilian cotton seed, he reports, failed in a very unaccountable way. The plants sprung up well, and looked very healthy until they were about six inches high, when they became blighted, and withered away.

20. The Egyptian cotton seed has been more successful; but some plants in the same field having succeeded, while others failed, leads to the impression that the seed was either not all of one season, or was not quite fresh.

21. Some of the seed succeeded remarkably well, the plants being strong and healthy, nearly four feet high, and not having that degenerated appearance which the cotton had assumed in many places during the year.

22. Samples of cotton grown in East Berar have been forwarded by the Deputy Commissioner, and one herewith transmitted.

23. Instructions have been issued by the Deputy Commissioner, that the seed of the experimental cotton which has been tried in 1859 be carefully kept for further experiment during the coming monsoon.

24. From the experiments made last year in East Berar, the Deputy Commissioner thinks that were good fresh Egyptian cotton seed to be imported at the proper time, so as to reach the district about the end of April, much better results might be expected than have been above described.

25. The cotton produced from the Egyptian cotton seed appears to be of a superior quality to that grown from indigenous seed in Berar; but it would require more attention to the cultivation than the Natives pay to the cultivation of the indigenous cotton.

Experiments with Supply No. 2, in West Berar. Egyptian and Brazilian cotton seed.

26. The report from the Deputy Commissioner, West Berar, shows that the result of the experiments tried in that district with the Egyptian and Brazilian cotton seed was an entire failure, which is attributed by the officer to the seed being old, and having lost its germinating properties in consequence.

Experiments with supply No. 2, in the Dharasco district. Egyptian and Brazilian cotton seed.

27. The experiments in the Dharasco district, with the seed of this supply, was likewise a failure.

28. No special report has been received from the Raichore Doab of the result of the sowings of the Brazilian cotton seed of this supply, but from a report by Captain Meadows Taylor, Deputy Commissioner of that district, it would appear that the Egyptian cotton seed succeeded remarkably well. A good deal of valuable seed, he states, will be saved this year (1860), and will be distributed for further trial. The cotton grown is fine in quality, and the plant grows and bears well, with every prospect of improvement. The Egyptian cotton seed, Captain Taylor observes, grows better, and is more productive, than New Orleans in the ordinary black soil. Of ten seers of cotton of this description produced in the Raichore Doab, the yield, when ginned, was two and a half seers cotton, and seven and a half seers seed, which is an average result.

Experiments with Supply No. 2, in the Raichore Doab. Egyptian and Brazilian cotton seed.

29. The following, however, taken from a report by Mr. Ricketts, Assistant Commissioner in charge of the Raichore Doab, of a subsequent date, is not so satisfactory :—

30. He observes that such experiments as those reported by Captain Taylor are not safe criterions to go by ; that the yield in these isolated cases, where skill and labour are expended, is astonishing, not only in the case of exotic, but also of indigenous cotton ; but these instances, though they may stimulate the ryots to follow the example set them, are perhaps useless in reporting on a staple product, which is to be grown and sold by the ryots in their own way. Mr. Ricketts' report, in fact, shows that the results of the experiments in regard to the New Orleans cotton seed have been more unfavourable than those of the preceding year, and that the Egyptian and Sea Island cotton was almost a total failure ; but this want of success is attributed chiefly to the want of rain in the Raichore Doab during the year 1859. In a further report received from Mr. Ricketts, that officer states that the Egyptian and Brazilian cotton seed having been put down only experimentally and in isolated parts of the district, no average statement of selling price can be given with any degree of certainty ; that specimens grown in the cantonment of Lingasoogoor appear similar, even if not superior in fibre and staple, to New Orleans, though the general colour does not appear to be so good, as irrigation seems to discolour

and blight a certain proportion of pods. The selling price, however, he states may be calculated at from one anna and seven pies to one anna and eight pies per lb.

Experiments with Supply No. 3, in West Berar. New Orleans cotton seed from Dharwar.

31. Of the New Orleans cotton seed received from Dharwar for experimental culture in West Berar, the Deputy Commissioner states that the seed sprang up in seven or eight days, and appeared healthy; that in about three months the plants were in blossom, bore three or four pods each, and attained the height of about two feet; that after the first picking all the plants withered and dried, and that the average cotton obtained per beega was about 40lb.

32. The seed was tried in both descriptions of soil in which the "jerry" and "bunny" (indigenous) sorts of cotton are grown in the district, and the seed, the Deputy Commissioner observes, may therefore be said to have had a fair trial; but notwithstanding, it is found that the cotton produced per beega is only equal to about one-third of what is produced from the cotton seed indigenous to Berar, which fact greatly tends to discourage the introduction of this new cotton into these districts. It is also the opinion of the ryots that the black soil of Berar is not well suited to the production of foreign cotton, as the plants generally present a stunted and poor appearance.

33. The Deputy Commissioner states that the average price of the Dharwar cotton in West Berar is two annas and six pies per lb., which is the same as that for the descriptions of cotton indigenous to Berar. The Dharwar New Orleans cotton, it is admitted by all, is superior to that of Berar, but as the quantity produced in that district is small, no proper value is fixed on it. Samples of the New Orleans cotton grown in different soils in West Berar, and of the indigenous cotton, have been forwarded by the Deputy Commissioner, and are herewith submitted.

Experiments with Supply No. 4, in East Berar. New Orleans cotton seed from Manchester.

34. The report from East Berar shows that the New Orleans cotton seed received from the Manchester Cotton Supply Association did not germinate in that district.

Experiments with Supply No. 4, in West Berar. New Orleans cotton seed from Manchester.

35. The West Berar report exhibits a similar result with this supply of seed.

Experiments with Supply No. 4, in the Dharaseo district. New Orleans cotton seed from Manchester.

36. The Deputy Commissioner, Dharaseo district, reports that the New Orleans cotton seed received from Manchester has entirely failed in that division. He states that he had part of a garden at Nuldroog sown with it, but a small number only of the seeds germinated. The plants that did come up were stunted, and a very small quantity of cotton was produced. It seems clear, he states, that the seed was old, and, when endeavouring to introduce a new species of cotton, it is of the greatest importance that the seed should be good, for if it is not, it will be difficult to induce the ryots to expend their labour on it a second time. The Deputy Commissioner promises to forward a specimen of the cotton from this growth.

Experiments with Supply No. 4, in the Raichore Doab. New Orleans cotton seed from Manchester.

37. The report from the Raichore Doab shows that none of the New Orleans cotton seed received from Manchester vegetated in that district. The Deputy Commissioner, however, states that the average selling price of New Orleans cotton in the Raichore Doab, grown from seed procured by the ryots from Dharwar, is about five rupees per candy above the selling price of indigenous cotton. More extended sowings of exotic cotton will be made this year in the Government gardens, and by Tehsildars, so as to retain the interest in the matter, and keep in hand a good supply of seed.

"Macarthy's Cotton Gins," received from the Manchester Cotton Supply Association.

38. Of the ten cotton gins received from Manchester, three were furnished to each of the districts of East and West Berar, and two to each of the divisions of the Raichore Doab and Dharaseo.

East Berar.

39. The Deputy Commissioner of East Berar reports that it was some time before the gins could be properly adjusted, and, when put into working order and tried, the results were by no means satisfactory. The gin, he observes, frequently

gets jammed, and all who have seen the cotton which has passed through the gin state that the staple has been torn and spoiled, and the opinion of all the Natives who saw it was, that if they had their cotton passed through that gin, it would not fetch nearly so much in the market as when prepared by the Native churka now in use.

40. The Deputy Commissioner, West Berar, states that, in consequence of the injuries to the gins in transit, they are out of order, and no artisans are to be found there who are capable of rendering them serviceable; but that as the railway engineers are shortly to arrive there, he hopes to have them put in working order, and promises a report after they have been tried.

West Berar.

41. Of the results of the trial of the cotton gins in the Dharaseo district, no report has been received.

Dharaseo District.

42. The gins in the Raichore Doab would appear to be working satisfactorily, as the Deputy Commissioner states that the two received by him from Manchester are not equal to the wants of the district, and recommends that the number should be increased.

Raichore Doab.

43. I would here beg to take this opportunity of submitting the result of a trial made by Captain Meadows Taylor, in the Shorapoor district, in 1859, of New Orleans cotton seed, obtained by him from Dharwar.

44. Captain Taylor states, that with this cotton he has tried a different soil, and a different period of sowing, than obtains in Dharwar, and it appears to him that the yield is more satisfactory, and the staple better and softer. In Dharwar, this cotton is grown upon black soil exclusively, and sown in September. Captain Taylor's trial of the seed in this instance was in very ordinary red granite soil, of a sandy quality, unmanured and unirrigated, and was sown in June. The fall of rain, he observes, at Shorapoor, was unusually scanty, yet the plants were healthy, and bore freely.

45. The cotton was gathered as it ripened, and was cleaned from the seed by a common Native churka. It has not been specially cleared or picked.

46. It will, he states, be of great importance to the ryots in the Shorapoor district if it is found that the New Orleans cotton grows and bears well on the red soil, in which the indigenous cotton does not answer at all. In the present instance, the sowings were of very limited extent, but he has no doubt that they can be very widely spread if the result continues as it now promises.

47. Captain Taylor forwarded a sample of this cotton to Messrs. Robert Strong & Co., Bombay, for transmission to the Manchester Cotton Supply Association, on which the following opinion was given by them:—

"The sample arrived this morning, and has been examined by two other parties of experience in the cotton trade, as well as by ourselves, and the conclusion come to is, that this sample is all that could be desired by those interested in promoting the cultivation of GOOD cotton in this country, and it is believed than any quantity of this quality would find a ready sale in Liverpool at the full rates for fair Orleans, at present 7¾*d.* to 8*d.* per lb. We have never had an opportunity of comparing this sample with cotton grown in black soil, but we are inclined to believe that the mode of culture adopted by you is peculiarly suited to this description of seed, no sample of New Orleans growth in this country having been seen here to equal yours. We may add, that one of the parties above referred to is the Secretary to the Chamber of Commerce, who has been paying great attention to the results of the cultivation of exotic cotton. It was remarked, in reference to the cleaning of your sample, that the churka had been very successful, whereas Dr. Forbes reports the churka to be entirely useless for cleaning American seed cotton. We mention this that you may observe if there is any greater difficulty in extracting the seed by this machine from this class of cotton than from the indigenous varieties."

48. In forwarding the above opinion, Captain Taylor adds: as far as this goes, this is the most satisfactory experiment he has yet made in exotic cotton, and that he will do his best to extend the cultivation next year in red or mussul soil, which he is strongly inclined to think is much more favourable to the culture of the New Orleans variety than black soil.

49. The seed, however, he remarks, should be sown in June, and, if early sowing is carefully attended to, the plant

begins to bear at the latter end of October, and continues to do so as long February or March.

50. The sowing, he states, in Shorapoor, in 1859, is hardly a fair trial, the soil of the plot of ground being very poor, and not manured or ploughed; but, under the encouragement afforded by the trial, better land will be selected next season, with, he trusts, more certain effects both as to quality and quantity.

51. He forwards a sample of this cotton, being a duplicate of that sent to Messrs. Robert Strong & Co.

52. I beg to append a list of the samples of cotton received from the district officers, and referred to in this report.—I have, &c.,

(Signed) CUTHBERT DAVIDSON,
Resident.

Hydrabad Residency, 18*th May* 1860.

(True copy)

(Signed) HASTINGS FRASER,
Officiating and Assistant Resident.

List of Samples of Cotton grown in the Hydrabad Assigned Districts, and in the Shorapoor Territory, forwarded with Despatch No. 75, dated 18th May 1860, to the Secretary to the Government of India, Foreign Department, Fort William.

SAMPLES FROM EAST BERAR.

No. 1A.—A specimen of the Egyptian cotton in first class garden land, but not irrigated. The plants grew of two heights, three feet and two feet; the pods were one and a half times larger in size than the pods of the country cotton plants. This is accounted for by the seed having reached a month late, and the plants not having attained their full size in consequence. The plants which grew three feet high had from fifteen to twenty-two pods each; the two feet plants only had from eight to ten. The experimental cotton produced on an average ten or twelve pods less than the Native cotton in the same locality. The smaller quantity of pods may be well accounted for by the

seed arriving rather late ; and the two descriptions of plants would seem to show that the seed was mixed.

No. 2A.—A specimen of Egyptian cotton from a first class black soil. The field in which this was tried was one-half manured and one-half left without manure. In the manured portion, the cotton grew three feet high, and in the other portion two feet. The pods of the large plants were, as in the former case, one and a half times larger than the country cotton pods ; the smaller plants became blighted, and bore only eight, or ten pods each ; the large plants produced about ten pods fewer than the Native cotton under similar circumstances.

The reports which accompanied the specimen from the district show that the seed did not come up regularly,—in many places not at all. Of seven or eight villages in which it was tried it succeeded in one only, and there very partially.

No. 3A.—A specimen grown in second class black soil. The plants attained the height of two or three feet. The plants bore, on the average, the same number of pods as the Native cotton grown in similar situations ; but the report states that the plant had a dried up appearance. The large plants had from five to fifteen, and the smaller from three to ten pods, but the pods were one and a half times larger than those of the country cotton. In one instance only an eighth part of the seed succeeded, the rest failed entirely ; while in another the plants came up well, but, when the pods filled, half of them fell off the plant.

No. 4A is a specimen of the cotton of the country known as jerry ; the pods are heavier than those of the other country cotton, known as bunny, and the cotton is rather whiter, and fetches a little higher price in the market.

No. 5A.—A specimen of the country cotton known as bunny, and which is the sort most cultivated in the south of the district. The seed is sown in the commencement of the rains, and the crop is ready in the month of November.

Another point which may be worthy of notice is, that the bunny cotton produces a great quantity of seed to a very small quantity of cotton. On weighing a quantity of this description previous to and after it has been separated from the seed, it is found that the seed weighed three times as

much as the cotton, or that four pounds weight of cotton taken from the plant produced three pounds of seed and one pound of cotton.

The same experiment was tried with jerry cotton and with Egyptian cotton, and it was found that three pounds taken from the plant produced, on an average, about two pounds of seed and one pound of cotton.

SAMPLES FROM WEST BERAR.

No. 1B.—Cotton produced at Akote, from New Orleans cotton seed received from Dharwar.

No. 2B.—Cotton produced at Devulghat, from New Orleans cotton seed received from Dharwar.

No. 3B.—Bunny cotton, grown at Devulghat.

No. 4B.—Jerry cotton, grown at Akote.

SAMPLES FROM DHARASEO DISTRICT.

No. 1C.—Egyptian cotton.

SAMPLES FROM RAICHORE DOAB.

No. 1D.—Indigenous cotton.

No. 2D.—New Orleans.

SHORAPOOR.

No. 1E.—New Orleans cotton, grown in red granite soil.

(True copy)

(Signed) HASTINGS FRASER,
Officiating and Assistant Resident.

When received, and Description.	Mark.	Our No.	Remarks of Valuers.	Valuation.
				d.
June.—Dharaseo; from Egyptian seed sent to the district in 1858.	No. 1	26	Colour rather brown; rather soft in staple, but silky, and pretty strong.	7½ per lb
From seed obtained from the above crop.	No. 2	27	Colour very brown, with seed and dirt; staple fine and strong, but not long.	6¾ & 7
From New Orleans seed sent by this Association.	No. 3	28	Colour rather brown; staple irregular, and tender.	4½
July.—Cotton produced at Akote from New Orleans seed received from Dharwar.	No. 1B	..	White, with brown leaf; staple even, and pretty strong.	5 to 5¼
Cotton produced at Devulghat from do.	No. 2B	..	Whitish, pretty clean; staple short, and tender.	4½ to 4¾
Bunny, grown at Devulghat.	No. 3B	..	Colour yellow, brown leaf; coarse open staple.	4 to 4¼
Jerry cotton, grown at Akote.	No. 4B	..	Colour yellow, brown leaf; staple very short and very tender.	3½
Egyptian cotton.....	No. 1C	..	Saw-ginned, cleaned; light brown colour; hard staple, rather short; much nep, and some waste.	5
Indigenous cotton, Raichore Doab.	No. 1D	..	Bright yellow colour; staple short, very weak, but even.	5¼ to 5½
New Orleans cotton, from Raichore Doab.	No. 2D	..	Colour brown; over ginned; clean, short, weak, and coarse in staple.	3½ to 3¾
New Orleans cotton, grown in red granite soil.	No. 1E	..	Colour bright and beautiful; clean, and well got up; staple fine and strong, but mixed with a deal of short.	8 to 8½

FAILURE OF EGYPTIAN COTTON AT DAPOOREE.

No. 2929 of 1860.

Revenue Department.

To H. Brooke, Esq.,
Secretary to the Chamber of Commerce.

Sir,—With reference to my letter No. 2595, dated the 19th ultimo, I am directed to forward herewith a copy of a letter from the Revenue Commissioner Southern Division, No. 1355, dated the 1st instant, reporting the result of the experiment of cultivating Egyptian cotton conducted by Dr. Gibson.—I have the honor to be, &c.,

(Signed) B. H. Ellis,
Secretary to Government.

Poona, 21*st August* 1860.

No. 1355 of 1860.

Revenue Department.

From J. N. Rose, Esq.,
Revenue Commissioner Southern Division,

To B. H. Ellis, Esq.,
Secretary to Government.

Sir,—With reference to the Government Resolution No. 2594, of the 19th ultimo, requesting me to ascertain the result of the experiment of cultivating Egyptian cotton conducted by Dr. Gibson, I have the honor to state that this officer, on being referred to on the subject, reports that,—

"The plant was carefully sown in the end of April, both at Dapooree and at Hewra. Its growth was assisted by watering until the rains fell, and afterwards, on the rains ceasing, by two more irrigations.

"The growth of the plant, and the wool produced, have neither of them been at all different from what that of cotton sown at the usual time in the Deccan would have been, *i. e.* from three-quarters of a beega about 44lb. of worthless short-stapled material, with hardly one seed free from disease.

"The undersigned cannot recommend a repetition of the experiment here."—I have the honor to be, &c.,

(Signed) J. N. ROSE,
Revenue Commissioner Southern Division.

Poona, Revenue Commissioner's Office, 1st August 1860.

(True copy)
(Signed) B. H. ELLIS,
Secretary to Government.

APPENDIX C.

COTTON FRAUDS.

To the COMMITTEE of the CHAMBER OF COMMERCE.

DEAR SIRS,—We think it right to bring to your notice a novel kind of fraud that has just been attempted to be practised upon us, in order that publicity may put our brother merchants on their guard against similar attempts. It is this—that a cotton dealer has made or procured an imitation of our stamp, with which he has marked, or caused to be marked, a quantity of inferior cotton never seen or examined by us, and has assorted the same so cleverly with what was really selected by us, that our muccadum had received and weighed a portion of it, before discovering the fraud. Messrs. Veerjee Nursee & Co. are the offenders; and though the evidence against them is necessarily circumstantial, and probably, therefore, insufficient to secure a criminal conviction, it is amply conclusive to warrant us in making this public exposure.—We are, &c.,

(Signed) GREY & Co.

Bombay, 4th April 1860.

No. 35 OF 1860.

To Messrs. GREY & Co.

GENTLEMEN,—I am directed by the Committee of the Chamber of Commerce to acknowledge receipt of your letter dated 4th inst., referring to a fraud committed on your firm

in the examination of cotton, and to inform you that the Committee think it highly desirable that the matter should receive the fullest investigation; and, with this object, they request that you will prosecute the offenders, at the expense, and upon the responsibility, of the Chamber.—I remain; &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 13th April 1860.

To H. BROOKE, Esq.,
Secretary Chamber of Commerce.

SIR,—We have to acknowledge receipt of your letter of yesterday's date, requesting, on the part of the Committee, that we should prosecute Messrs. Veerjee Nursee & Co., for the attempted fraud on us, reported in our letter of the 4th instant.

In reply, we beg to repeat that we do not think there is sufficient legal evidence to ensure a criminal conviction, and that we are satisfied with having put our neighbours on their guard, by giving the case publicity through the medium of the Chamber.

But if the Committee desire it, we have no objection whatever to the investigation of the case by the police authorities, and are ready to afford them all the information and assistance in our power.—We have the honor to be, &c.,

(Signed) GREY & Co.

Bombay, 14th April 1860.

To the COMMITTEE of the CHAMBER OF COMMERCE.

DEAR SIRS,—In compliance with your request of 13th ult., we placed our complaint against Messrs. Veerjee Nursee & Co. in the hands of the Commissioner of Police, for investigation. The result of his inquiries was only to elicit the fact that the stamp which had been fraudulently used was very like an old one of our own, which had been out of use

for several years. If the latter was the identical one used, it must have been fraudulently obtained from our establishment; so that, under any circumstances, there can be no doubt that a fraud was intended and practised.

As, however, we have not sufficient evidence to ensure conviction, and the police authorities have not been able to throw any more light upon the case, we have no desire to prosecute it any further.—We are, &c.,

(Signed) GREY & Co.

Bombay 25th May 1860.

APPENDIX D.

WOOL TRADE WITH BELOOCHISTAN.

No. 405 of 1860.

General Department.

From the Commissioner in Scinde,

To the Chairman Chamber of Commerce, Bombay.

Sir,—I have the honor to forward, for the information of your Chamber, copy of a letter I have this day addressed to the Chamber of Commerce at Kurrachee, in reference to the improvement of the wool trade with Beloochistan, and to express a hope that the information supplied by Majors Merewether and Green may prove useful to the mercantile community.—I have the honor to be, &c.,

(Signed) J. D. Inverarity,
Commissioner in Scinde.

Commissioner's Office, Kurrachee, 28th May 1860.

(Copy.) No. 4040 of 1860.

General Department.

From the Commissioner in Scinde,

To D. McIver, Esq.,
Chairman Chamber of Commerce, Kurrachee.

Sir,—I have the honor to forward, for the information of the Chamber of Commerce, the following observations and suggestions for the improvement and better development

of the wool trade in Beloochistan, supplied by the Political Superintendent on the Upper Scinde Frontier, Major Merewether, who writes as follows ;—

"The inhabitants of Beloochistan are essentially a nomade race, and may be said to live almost by their flocks; they barely cultivate enough of cereals for their own consumption ; but change about from place to place as the pasture disappears. During the summer months, they remain above the passes, but in winter, when the ground there is either covered with snow, or there is great scarcity of vegetation, they bring their flocks in thousands down into the plains of Kutchee, and graze there until the return of the hot weather.

"From ignorance of the means of improving it, and from want of knowledge of the value of the wool, the Brahooees pay little attention to either the cleanliness or goodness of it. This might easily be remedied.

"Some time back, it was proposed that English rams should be sent out to India to be sold to, or distributed among, the people of the countries from which the wool is obtained, for the purpose of increasing the length of the staple. One of the best places for the trial of such an experiment would be Beloochistan. The climate more nearly resembles England than any other. It is a very large wool-producing country, and the inhabitants are mostly all shepherds. I would, therefore, recommend, as was suggested by Major Green, that a dozen or two of good well-bred rams be procured from England, and sent up here by Government, for distribution in the manner which seems best to Major Green. If these rams were sent for at once, they might be brought by ship round the Cape direct to Kurrachee, be in Scinde about the middle of the cold season, and reach Khelat within a month afterwards.

"The above might be a Government measure, but the merchants who have an interest in the production of wool might add a further supply, which Major Green would dispose of in gift to the best possible advantage.

"One of the great objections hitherto to the wool of Beloochistan has been that it comes into the market in a very dirty and most indifferent state. This is partly owing to the carelessness and ignorance of the owners,

and partly to the rascality of the go-between traders, who purchase from the owners for the merchants at the sea-ports or elsewhere. These agents receive instructions to buy and send down a certain quantity of wool. They purchase, say, three-fourths of the weight required, and then, to make it up to the full weight, mix oil and dirt with it, and send it down as the natural product of the country.

"Major Green, in a letter just received from him, says on the subject:—'I had a long conversation yesterday with one of the Lehri Chiefs regarding wool, and he suggested, without any assistance from me, that it would be an immense advantage both to wool-buyers and sellers, if some respectable merchant came to Khelat (above the passes) and Bhagh (below the passes, in the plains of Kutchee) during the shearing season, which takes place in the former place at the present time, and in the latter during the winter. The present mode of procedure is this: the Banyans of this country, who are great rogues, with little or no capital, go amongst the shepherds, and exchange dates, oil, cloth, &c. for the wool. The unhappy shepherds are cheated by these right and left. The wool is not bought from them by weight, but that of six sheep is valued at one rupee; this, however, is not paid in money, but, as above stated, in kind, at the Bunnia's valuation. The Bunnias will not allow the shepherds to wash the sheep before shearing, saying they prefer the wool dirty. The sheep are clipped twice a year. On my asking why this was done, the Lehri Chief said, "if we do not, the sheep destroy the wool, either by rubbing themselves against the rocks, or by eating it." There can be no doubt but that if a respectable Native agent from some mercantile house was established here [Khelat], much good might be done, and if he refused to purchase any wool which was not clean, and gave a fair price for it if good, the shepherds and chiefs of the country, whose only wealth consists in sheep, would soon themselves turn their attention to improvements. Carriage is plentiful and cheap here, and the wool might be carried direct to the seaport, Kurrachee. The sole wealth and export from this country is wool; the present export in a good season amounts to about 6,000 maunds, or some 50,000lbs.

This, with attention and proper encouragement, might be more than quadrupled. When I say a good season, I mean when rain has fallen, so as to cause a plentiful supply of grass; when this is not the case, the sheep are poor, and die in large numbers.'

"The remedy for the injurious adulteration is very simply and plainly shown by Major Green; the market would be supplied with a better article, at a cheaper rate, and the producer would gain a fairer return for his labour.

"I quite agree with Major Green, that the persons to move in this matter are the merchants themselves, and if any one or more houses would like to depute good Native agents to visit Khelat, and the sheep grounds generally, I shall be very happy, on their coming here, to forward them on to Major Green, who will give them every assistance in his power, and introduce them to the large sheep-owners, and they will be as safe from injury or molestation as they would be in Bombay, or any part of India.

"With regard to conveyance of the wool to the coast, Major Green refers only to the direct land carriage; but when the steam traffic on the Indus is fully developed, as it promises to be shortly, the purchasers will be enabled to dispense with a great portion of the land carriage, which must always be most expensive, and to save much time, by bringing their bales to Sukkur. They might then send them in two or three days' time from Sukkur to Kurrachee, by steamer and rail. To allow of their doing this in the most economical manner, they should establish presses at Sukkur, the bulkiness of wool bales making all kinds of carriage expensive.

"Ultimately, if a branch of railroad is made, as it ought to be, from Sukkur to Dadur, at the mouth of the Bolan Pass, the screws might be transferred to Dadur, which would then become the emporium of the wool, not only of Beloochistan, but of Affghanistan also."

2. The establishment of local agents, for the purchase of wool direct from the producers, and the introduction of rams of improved breed, can have none but beneficial results, and merchants, where they may find it consistent with their interests to act upon Major Merewether's suggestions, may

rely upon receiving from that officer at Jacobabad, and from Major Green at Khelat, every assistance in carrying out their objects.

3. A copy of this letter has been forwarded to the Chamber of Commerce, Bombay.—I have the honor to be, &c.,

(Signed) J. D. INVERARITY,
Commissioner in Scinde.

Commissioner's Office, Kurrachee, 28th May 1860.

(True copy)

(Signed) M. J. SHAW STEWART,
Assistant Commissioner.

No. 576 OF 1860.

GENERAL DEPARTMENT.

From the COMMISSIONER IN SCINDE,

To the CHAIRMAN CHAMBER OF COMMERCE, Bombay.

SIR,—In continuation of my letter to your address, No. 405, dated 28th May last, I have the honor to forward, for the information of the Chamber, further particulars on the subject of the wool trade of Beloochistan, contained in the accompanying extract from a letter from Major H. Green, Political Agent Khelat.—I have the honor to be, &c.,

(Signed) J. D. INVERARITY,
Commissioner in Scinde.

Commissioner's Office, Kurrachee, 19th July 1860.

Extract Paragraphs 42 *to* 46 *from a letter from Major H. Green, Political Agent, Khelat, to the address of the Political Superintendent on the Frontier, No.* 6, *dated the* 14*th June* 1860.

42. During the past year, I have had many conversations, both with merchants passing through the country,

regarding the roads, and with chiefs, whose tribes, from the number of their flocks, are the greatest producers of wool.

43. There are, as before mentioned, two principal roads leading from Central Asia to British India: these branch off at Quettah, one leading *via* the Bolan to Shikarpore, the other *via* Khelat to Kurrachee. It has long been disputed which is the most direct, and best for commercial purposes. I have therefore taken some trouble to collect the following data, supposing wool to be the principal object of traffic. From Shawl to Kurrachee *via* Khelat (on account of the coolness of the climate of the upper road, the kafilas are enabled to make much longer marches than by the lower),—

Camel marches	20
Average camel-hire	Rs. 14
Tax per camel-load of 8 maunds	„ 6

Thus, the number of marches is 20, and the cost for carriage and taxes, per 8 maunds, Rs. 20.

From Shawl to Kurrachee *via* the Bolan Pass,—

Camel marches from Shawl to Sukkur	20 days.
Per boat to Kurrachee	12 „
Average camel-hire from Shawl to Sukkur	Rs. 12
Tax per camel-load of 8 maunds	6
Boat-hire from Sukkur to Kurrachee, per 8 maunds	4

The length of time taken by the Bolan route is 32 days, and the cost for 8 maunds Rs. 22.

Thus *via* Khelat there is a saving of 12 days in time, and Rs. 2 in cost. But, even supposing Government, or any private company, could ensure the presence of the requisite number of steamers being at Sukkur to receive the wool from Affghanistan (about 150,000 maunds yearly), still the steamers charge by bulk, and not by weight, and all know the cubic space taken up by 8 maunds of unpressed wool; the saving of time would, therefore, not compensate for the increase in the price of carriage.

44. The wool, the sole produce of these mountains, I find, from a rough calculation, to amount annually to an

extent of from 8 to 10,000 maunds. I also see, from the commercial reports in the newspapers, that it holds an inferior position in the market to that of Affghanistan. This has led me to inquire the cause.

45. The whole of the tribes of Beloochistan form a society of wandering shepherds. Their sole riches are the produce of their flocks, from the milk of which they produce cheeses,—almost their only sustenance,—and the wool they exchange for grain, cloth, powder, &c. During the winter months they migrate from the mountains of Beloochistan to the plains of Kutchee, and when the intense heat of summer sets in, in the latter, they return to the mountains. Their flocks are shorn twice a year,—in May, when they ascend the mountains, and in October, when they return to the plains. On my asking why one shearing during the year would not be sufficient, they reply, that if the sheep are not shorn at the regular seasons, they destroy the wool, either by eating it, or rubbing themselves against the rocks. During the shearing seasons, the Khelat and Shikarpore Bunnias go amongst the shepherds, and exchange commodities for the wool, that of six sheep being valued at one rupee. This appears a fixed price. When, from want of rain, grain is scarce in the country, the Bunnias advance it on the next season's shearing, and even advance ready money to the chief. Thus, most are entirely in the hands of the Bunnias. On my asking their reason for not washing the sheep before clipping, I was informed that the Bunnias forbid it, preferring the dirty wool, because it weighed heavier. This may account for its inferior position in the market.

46. I cannot help thinking, that if some respectable Native agents of British firms were sent to this country during the shearing season, with capital to purchase wool from the shepherds, and that if they acted fairly towards them, giving good prices for good clean wool, and rejecting the bad, both quality and quantity would soon increase. Carriage is abundant and cheap, and the purchaser might send the produce direct to the seaport.

(True extract)

(Signed) M. J. SHAW STEWART,
Assistant Commissioner in Scinde.

MERINO WOOL.

No. 2130 of 1859.

From Richard Spooner, Esq.,
Commissioner of Customs, Salt, and Opium,

To H. Brooke, Esq.,
Secretary Chamber of Commerce.

Sir,—With reference to the Government Resolution No. 1858, dated the 16th May 1859, I have the honor to forward herewith a box containing the wool therein referred to, and to request that you will have the goodness, as requested in the Government Resolution aforesaid, to dispose of the wool by sale, with the view of ascertaining its market value in Bombay.—I have the honor to be, &c.,

Merino Wool.

(Signed) Richard Spooner,
Commissioner of Customs, Salt, and Opium.

Bombay, Office of Commissioner of Customs, Salt, and Opium, 29th November 1859.

To the Members of the Chamber of Commerce,
Bombay.

Gentlemen,—By direction of the Committee, I beg to hand you herewith a sample of merino wool received from Mr. Spooner, the Commissioner of Customs, with a request to dispose of it on behalf of the Government, with the view of testing its mercantile value in Bombay.

The quantity supplied is about gross 137lb., and as the parcel is small, it is hoped that those members who may be conversant with the value of the article will offer such a price as it might be expected to realise if delivered in any considerable quantity.—I remain, &c.,

(Signed) H. Brooke,
Secretary.

Chamber of Commerce, Bombay, 15th December 1859.

Minute by Messrs. Heycock & Co.

THE sample of wool is the best we have yet seen in India, and gives great promise that this country will supply the best qualities of clothing wool. The sample is an improvement upon the ordinary Spanish growth, and approaches nearer to that of Saxony; and, by careful attention, we believe might be got in time to equal the Silesian, which is the finest grown wool in Europe. The Australian qualities degenerate from the original fineness of their best flocks, and yield more weight, but from the sample now sent being finer than ordinary Spanish, we are inclined to the belief that in the place where this sample was grown the sheep will improve in quality rather than in quantity. A Silesian fleece of finest quality does not average more than ¾lb. It is probable that the Australian farmers find that weight pays better than quality, and it may prove the same in this country. But on either condition, the sample is one of great promise to India. Its condition is bad. It ought to have been washed before being shorn.

(Signed) HEYCOCK & Co.

Minute by Messrs. Wallace & Co.

THE wool, sample of which is forwarded for report, is of so totally different a class from that known in this market, that we should doubt Government being able to obtain a proper valuation here; and to obtain a report of real value, we would suggest that the parcel be forwarded to London.

(Signed) WALLACE & Co.

No. 1143 OF 1860.

From the COMMISSIONER OF CUSTOMS, SALT, & OPIUM,
To H. BROOKE, Esq.,
Secretary Chamber of Commerce.

SIR,—With reference to the letter from this Office No. 2130, dated 29th November 1859, I have the honor to request that you will have the goodness to inform me of the result of the

Merino Wool.

wool forwarded to you with the letter above quoted, in order to enable this department to furnish the information required by Government in their Resolution No. 1858, dated 16th May 1859.

2. This department will thankfully receive any remarks the Chamber may have to make in respect to the quality and the prospects in the Bombay market of the description of wool in question.—I have the honor to be, &c.,

(Signed) E. L. JENKINS,
Depy. Commr. of Customs, Salt, & Opium, P. D.,
For Commissioner of Customs, Salt, and Opium.

Bombay, Office of the Commissioner of Customs, Salt, and Opium, 18th July 1860.

No. 84 OF 1860.

To RICHARD SPOONER, Esq.,
Commissioner of Customs, Salt, and Opium, Bombay.

SIR,—By direction of the Committee of the Chamber of Commerce, I have the honor to acknowledge receipt of your letter No. 1143 of 1860, dated 18th ult., inquiring respecting the box of merino wool sent to the Chamber for report and valuation.

I have now the pleasure to hand you copy of a letter received from Messrs. Ritchie, Steuart, & Co., who kindly undertook to forward it to London for report, from which you will observe that the opinion in England is of a favourable character. Further information is promised by the following mail, on receipt of which I shall have the honor of again communicating with you on the subject.—I have the honor to be, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 4th August 1860.

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce, Bombay.

DEAR SIR,—We have the pleasure to hand you, for the

information of the Committee of the Chamber, the following extract from a letter which we received by last mail from our friends Messrs Finlay, Hodgson, & Co., London :—

"We have now had the bale of merino wool received in the *Star Queen* carefully examined, and it is thus reported on and valued.

"This wool is of German breed, and in its present condition worth almost 1*s.* 7*d.* to 1*s.* 8*d.* per lb. If properly managed, not so much broken, and clean washed, it would be worth about 2*s.* 2*d.* per lb. This wool should be washed clean previous to being shorn, and, when shorn, each fleece rolled up carefully by itself, instead of being broken and mixed, as in the present sample.

"It is not the custom in this market, and does not pay, to clean the wool previous to offering it for sale, as the consumers can do it better for themselves, and at much less cost. We are, however, having this bale thoroughly cleaned, and next mail we hope to say something further about it."—We remain, &c.,

(Signed) RITCHIE, STEUART, & Co.

Bombay, 27*th July* 1860.

APPENDIX E.

INDIGO.

No. 4262 of 1859.

REVENUE DEPARTMENT.

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce.

SIR,—I am directed by the Right Honorable the Governor in Council to forward to you, for the information of the Chamber, the accompanying copy of a letter from the Commissioner in Scinde, together with the sample of indigo therein referred to.—I have the honor to be, &c.,

No. 324, dated 7th October 1859, with accompaniment, reporting a successful attempt to cultivate indigo in the Frontier Districts of Upper Scinde.

(Signed) B. H. ELLIS,
Acting Secretary to Government.

Bombay Castle, 28th October 1859.

No. 324 of 1859.

REVENUE DEPARTMENT.

From the COMMISSIONER IN SCINDE,

To the Right Hon. Lord ELPHINSTONE, G.C.B., G.C.H.,
Governor and President in Council, Bombay.

MY LORD,—I have the honor to forward, for the information of your Lordship in Council, copy of a letter dated 26th ultimo, No. 530, from the Political Superintendent on

the Frontier of Upper Scinde, reporting a successful attempt to cultivate indigo in the Frontier Districts.

2. The sample of indigo is forwarded in a separate packet.—I have the honor to be, &c.,

(Signed) H. B. E. FRERE,
Commissioner in Scinde.

Commissioner's Office, Kurrachee, 7th October 1859.

(Copy.) No. 530 OF 1859.

From Major W. L. MEREWETHER,
Political Superintendent, Frontier of Upper Scinde,
To Sir BARTLE FRERE, K.C.B.,
Commissioner in Scinde.

SIR,—I have the honor to forward a specimen (in separate packet) of indigo produced during the past season in the Frontier Districts.

2. Attempts to raise indigo have been made before, but, though the plant came up, it was so poor that the cultivator did not think it worth his while to work it on the spot. This is, therefore, the first indigo actually made here, and from plants grown in these districts.

3. The place where it was produced is to the east, and on the very banks of the Noorwah, about two miles and a half north-east of Jacobabad, in the hollow near Ahmedpoor. The cultivator, a Bunnia, by name Nimboo, native of Meerpoor, left bank, obtained a grant of 20 beegas of land as an experiment for this season. Of the twenty, he cultivated eighteen beegas. The result is as follows:—

Amount of indigo obtained, 5 maunds, value Rs. 82-8-0 per maund, as sold in the market				Rs. 412	8 0
Total cost of cultivation, making vats on the spot, watching, &c.	Rs.	305	0 0		
Land rent on the whole grant, at 1 rupee per beega		20	0 0		
				325	0 0
Amount of clear gain				Rs. 87	8 0

4. The experiment being so successful, the man intends to continue the cultivation on a larger scale next season, taking up more land near the same place. The ground being very low, six feet below high-water level, the supply of water from the Noorwah can be carefully regulated, and is certain from the beginning of the month of May—generally even earlier than that—to the end of September.

5. There is no peculiarity in the soil; it is of the same nature as that of the whole of Scinde,—argillaceous, but with, perhaps, a little more sand than is usually found in low lands, mixed up with it. This is owing to a range of sand-hills being not very far distant to the eastward, from whence the prevailing summer winds blow, and the sand gets spread lightly over the annual clayey deposit.

6. Half a mile to the northward *the Desert used to commence.*—I have the honor to be, &c.,

(Signed) W. L. MEREWETHER, Major,
Pol. Supt. Frontier Upper Scinde.

Political Superintendent's Office, Jacobabad, 26th Sept. 1859.

(True copy)

(Signed) M. J. SHAW STEWART,
Assistant Commissioner in Scinde.

(True copies)

(Signed) B. H. ELLIS,
Acting Secretary to Government.

No. 132 OF 1859.

To B. H. ELLIS, Esq.,
Acting Secretary to Government, Bombay.

SIR,—By direction of the Committee of the Chamber of Commerce, I have the honor to acknowledge receipt of your letter No. 4262 of 1859, dated 28th October, referring to the production of indigo in the Frontier Districts of Scinde.

The sample forwarded has been circulated amongst the members, and, as a first production, it is regarded as highly creditable, and worth Rs. 38 to Rs. 40 per maund of 41lb.

It would be difficult to say what would be the value in the English market, if produced in any considerable quantity.

It would be a great convenience to the mercantile community if the beegas and maunds that are used up-country, and which are of variable quantity, were, in references of this description, converted into the English acre and English avoirdupois pound, as there is always more or less uncertainty as to which beega or maund may be referred to. The Chamber infers, in the present instance, that the maund is of 82½lb., and if so, the up-country value would be about the same as that in Bombay.—I have the honor to be, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 2nd October 1859.

APPENDIX F.

YELLOW WOOD.

Memorandum.

Mr. F. A. Carvalho begs to submit, for the inspection of the Chamber of Commerce, two pieces of wood received from Quilimane (province of Mozambique, Africa), one called "sandal-wood," and the other of yellow colour, which may, perhaps, be useful for dyeing purposes.

(Signed) F. A. Carvalho.

Bombay, 19th September 1859.

To F. A. Carvalho, Esq.,
Bombay.

Sir,—By direction of the Committee of the Chamber of Commerce, I beg to annex copy of a letter received from Messrs. Finlay, Scott, & Co., who kindly undertook to forward to London, for report and valuation, portions of the two pieces of wood received from you on the 19th September last.—I remain, &c.,

(Signed) H. Brooke,
Secretary.

Chamber of Commerce, Bombay, 3rd August 1860.

To H. BROOKE, Esq.,
Secretary Chamber of Commerce.

DEAR SIR,—We have received the following report from our London friends upon the two pieces of dye-wood which the Committee requested us to forward:—

"Of the two pieces wood, No. 1 is of no value as a dye-wood. No. 2 contains a yellow dye, and, with the bark properly cleaned off, at the present time it would be worth £6 to £7 per ton. We enclose two small samples, showing the result of the trial."

The samples referred to accompany this letter.—We remain, &c.,

(Signed) FINLAY, SCOTT, & Co.

Bombay, 20th July 1860.

To H. BROOKE, Esq.,
Secretary Chamber of Commerce, Bombay.

SIR,—I have the pleasure to acknowledge the receipt of your favour of the 3rd instant, No. 83, annexing copy of communication from Messrs. Finlay, Scott, & Co., reporting on the valuation, &c. in London, of two pieces of wood from the Coast of Africa, delivered to you in September 1859.

I beg to tender both to the Chamber and to Messrs. Finlay, Scott, & Co. my very best thanks for their kindnesses in procuring for me this information, which will, I am sure, be of great value to my friend who sent to me the said samples. —I remain, &c.,

(Signed) F. A. CARVALHO.

Bombay, 8th August 1860.

APPENDIX G.

FLAX.

To H. BROOKE, Esq.,
Secretary Chamber of Commerce, Bombay.

SIR,—I am desired by a Committee of Flax Spinners and Merchants here, most of whom are Members of this Chamber, to inquire whether the subject of promoting the cultivation of the flax plant in those districts in India that may be most favourable for its growth, and the production of useful fibre for spinning purposes, is being entertained by the Bombay Chamber.

In consequence of the supplies of flax fibre drawn from the usual sources by this country having for some time past proved totally inadequate to meet the requirements of our linen trade, the matter of increasing our supplies has become one of immense importance, and, as you will be doubtless aware, the attention of all interested has been seriously directed to India as the most probable field for providing a remedy.

You will, perhaps, be kind enough to inform me whether any operations have been yet commenced by Government or by other hands towards effecting the desired object in the Punjaub. There is a feeling here that more good may be effected by parties in India itself, and especially if influenced by the Bombay and Madras Chambers of Commerce, than can possibly be the case by those so remote from the true scene of action as our manufacturers here; nevertheless, our Association of Flax Spinners in the Leeds District will be glad to co-operate with your Chamber of Commerce

as far as may be practicable, and any suggestions you may favour them with, through me, will receive their best attention.

There is no doubt of the demand existing for flax in the markets of the United Kingdom; and if the Natives of India can be induced to turn their attention to its cultivation, a large export trade in that article would be the certain result.—I am, &c.,

(Signed) SAM. SWAN, Jr.,
Secretary to the Leeds Chamber of Commerce, and to the Flax Supply Association.

Chamber of Commerce, Leeds, 21st September 1859.

No. 133 OF 1859.

To SAMUEL SWAN, Jr., Esq.,
Secretary to the Chamber of Commerce, Leeds.

SIR,—I am directed by the Chamber to acknowledge receipt of your letter of 21st September, and to inform you that the subject of flax cultivation has repeatedly occupied the attention of the Chamber.

The straitened condition of the Indian finances, the want of intelligence and enterprise amongst the people, and the enormous expense and ill success that have attended the experiments of Government in similar matters, deter the Chamber from urging upon them the desirability of experiments in this direction.

The only course that the Chamber believes could be attended with any prospect of success would be for those chiefly interested to send out a small experimental establishment, which should be located in suitable districts, and which should endeavour to demonstrate the practicability of producing this article profitably, and in a mode suited to the limited intelligence of the agricultural classes.

Should your Chamber resolve on this course, they may rely upon their efforts being seconded by the Bombay community in any way that may appear serviceable.—I remain, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 12th December 1859.

APPENDIX H.

LICENSE BILL.

PETITION TO THE LEGISLATIVE COUNCIL.

To the Honorable the LEGISLATIVE COUNCIL OF INDIA.

The humble Petition of the undersigned Inhabitants of Bombay,

1. RESPECTFULLY SHEWETH,—That your petitioners have, at a public meeting convened for the purpose, taken into consideration the "Bill for Licensing Trades and Professions," which was read a second time in your honorable Council on the 13th of August last, and which now stands referred to a Select Committee of your honorable body.

2. That your petitioners, whilst willing to contribute their fair proportion of the additional revenue that may be required to meet the wants of the Indian exchequer, and whilst being prepared to submit to an income-tax levied on the same principles, and by machinery similar to that of the English tax, provided the financial embarrassments of India render it imperative upon your honorable body to resort to a tax of that description, beg respectfully to remonstrate against the partial operation of the Bill now before your Committee, and to submit, for the consideration of your honorable body, some of the graver objections, in point of principle and of detail, to which the Bill is obnoxious.

3. Though the Bill purports to be a "Bill for the Licensing of Trades and Professions," your petitioners cannot but regard it in the light of an income-tax,—an income-tax which is arbitrarily imposed upon a portion only of those who

ought to be amenable to such a tax; and an income-tax which, on the face of the Bill, is levied in defiance of the principle of equality, and by a machinery which is not only contrary to precedent, but calculated to produce needless oppression and mischief.

4. Your petitioners are aware that a certain degree of inequality of pressure is inseparable from an income-tax, viewed in its practical operation, however fairly the tax may be adjusted by the Legislature; but your petitioners submit, that the present Bill not only tends to augment those inequalities which are inherent in an income-tax, but actually recognises and admits numerous others of a much graver nature, which are, as your petitioners believe, at variance with every sound principle of finance; and in proof of this, your petitioners beg leave to point to the following defects that appear on the face of the Bill:—

(*a*). That whilst the profits of trades and professions, and the emoluments of certain offices, are subjected to the burden of an income-tax, the rents and profits of what is termed realised property enjoy a total immunity from the tax; although the fixed income derived from the latter source has universally been recognised as furnishing at least as fit a subject for such a tax, if not a fitter one, than the variable income derived from trades and professions.

(*b*). That whilst the pay of civil and staff officers, in Sections XXIV. and XXV., is directed to be taxed at the rate of three per cent. per annum upon the precise amount of their salaries, the other persons who are subject to the operation of the Act are taxed under classes, the difference between the gradations of which is considerable; thus allowing of the latter being taxed at the rate of three per cent. upon an amount which is in many cases very much below the precise amount of their net annual profits.

(*c*). That the Bill, by adopting as one of its principles the plan of assessment under classes, will in many cases tax annual profits, varying considerably in amount, at one and the same rate. Thus, a man gaining by his trade Rs. 32,000 a year will pay no more for his license than another who earns only Rs. 17,000 a year; each will pay Rs. 500, under class 10.

(*d*). That whilst persons holding offices, and others, under Sections XXIII., XXIV., and XXV., are exempt from taxation, provided their monthly salaries are under Rs. 100, persons

whose net gains in trade are less than Rs. 6 a month must take out a license under class 17, and pay Rs. 2 a year.

(*e*). That while by one clause of the Act the petty tradesman earning less than Rs. 6 per month is forced to contribute, under another clause a more favoured class is exempted up to Rs. 14. To tax profits so small in amount as these, would be, as your petitioners believe, to trench upon the necessaries of life,—a contingency which the corresponding English Act is careful to avoid.

(*f*). That the taxation of profits arbitrarily stops at Rs. 5,000 under class 1, which represents an income of Rs. 1,67,000, an amount much below the annual net profits of certain trading and banking companies in India.

5. Your petitioners are unable to discover any sufficient reason for the existence in the Bill of the anomalies and inequalities to which they have ventured as above to direct the attention of your honorable body.

6. Your petitioners, besides objecting to the principles upon which the proposed tax is based, beg humbly to point out to your honorable body certain defects in the provisions of the Bill, and certain objections to the machinery by which the tax is to be collected and enforced, which, if not rectified, are likely to cause great embarrassment to the mercantile community, and to occasion an amount of oppression almost intolerable.

7. Your petitioners do not observe that the Bill points out any principle on which the annual net profits of trades and professions is to be calculated. In the absence of such a principle, the tax-payer would in some cases be utterly at a loss to know what amount to return, and the collector, or other officer, in whom the Bill vests the power of determining the class of license, would be equally at a loss; and the result would, in some cases, be, that either no assessment at all would be made, or else an arbitrary valuation would be resorted to, at the caprice of the assessing officer.

8. Your petitioners observe, that the Bill appears expressly to provide only for the case of trades and professions in which profits are being made at the time of the passing of the Act, but contains no express provisions to meet the case of persons commencing business after the Act comes into operation, or of persons who, though in business at that time, yet are making no profits, or have incurred

losses which countervail the profits of preceding years. The absence of any such provision renders doubtful the position of these persons with reference to the necessity on their part of taking out a license. It is uncertain when persons under such circumstances are required to take out a license; and such uncertainty is invested with the gravest importance when viewed in connection with that clause of the Bill which disables unlicensed persons from recovering in suits for trade debts.

9. Your petitioners are aware that an income-tax must be in some degree an inquisitorial tax; but they beg humbly to represent that the Bill under review is inquisitorial to an unprecedented and needless degree, and is calculated to expose the mercantile community to unnecessary vexation and hazard; and, in proof of this, they would refer your honorable body to—

1*st.*—The clauses of the Bill conferring on the assessing officer the power of summoning all persons to give evidence and produce their books in order to enable him to determine the class of license to be taken out; and this power too, for aught that appears in the Bill, the assessing officer may exercise, not only for the purpose of assessing the person summoned and producing his books, but also for the purpose of assessing any other person supposed to be liable to assessment.

2*nd.*—To the clauses of the Bill directing a list to be prepared and published, and permitting that list to be inspected by all persons liable to assessment, and the authorised agents of such persons.

3*rd.*—To the clause requiring every licensed person, when suing for the recovery of debts, to prove at the trial that he has obtained the proper license.

10. Your petitioners also beg humbly to direct the attention of your honorable body to the oppressive nature of the penalties mentioned in the Bill, some of which bear with peculiar hardship on the mercantile community, inasmuch as these penalties, from the vague nature of some of the clauses of the Act, are liable to be incurred unwittingly, and with no intention to defraud the revenue. The clause disabling persons who are required to take out a license, but have failed to do so, from recovering their trade debts, and enforcing contracts in a court of law, is peculiar-

ly oppressive; particularly when the uncertainty as to the time at which certain persons are required to take out a license, and which has been alluded to above, is regarded. This disabling clause does not leave it to the defendant in a suit, but makes it the duty of the judge, to ascertain that the Act has been complied with, and so, proof of the taking out of a license under the proper class will be one of the questions to be determined in every mercantile suit, and any failure in making such proof will be fatal to the claim of the plaintiff.

11. Your petitioners believe, that in assessing the income-tax in England the chief reliance is placed on the returns of the person to be assessed, and the accurary of those returns is deemed to be sufficiently secured by investing the assessing officer with the power of surcharging such returns as seem to him to be manifestly incorrect; and if the surcharged party wishes to dispute the justice of such surcharge, he can do so by appealing to the Commissioner of the income-tax, who is sworn to secresy, and by proving before such Commissioner the accuracy of his original return, by production of his books, or of such other documents as he thinks proper.

12. Your petitioners are unable to discover any sufficient reason why, in lieu of this simple and easy method of assessing an income-tax, the Bill now before your Committee should confer upon the collector, or other officer, the power of determining the class under which each licensed person is to be assessed, or of compelling the production of books and evidence; or why such grievous pains, penalties, and disabilities should be resorted to in order to secure the accuracy of the returns under the Act, which renders an accurate return in many cases nearly, if not wholly, impossible.

13. In conclusion, your petitioners humbly pray that your honorable Council, taking into consideration the matters contained in this petition, will substitute some other means of increasing the revenue, or will at least make such amendments in this Bill in Committee as will obviate the objections to it which have been pointed out by your petitioners; and your petitioners, as in duty bound, will ever pray.

(Signed) W. B. TRISTRAM,
Chairman.

Bombay, 17th October 1859.

PETITION TO PARLIAMENT.

To the Right Hon. the LORDS SPIRITUAL AND TEMPORAL, in Parliament Assembled.

The humble Petition of the Merchants and other Inhabitants of Bombay, unconnected with the Government Service,

1. HUMBLY SHEWETH,—That your petitioners belong to those classes of the community which are most immediately and most seriously affected by the financial measures of the Indian Government.

2. That your petitioners have, on more than one occasion since the recent need of increasing the taxation of this country began to be felt, had reason to be dissatisfied with the means employed by the Government to replenish the Indian exchequer; but the Legislative Council have lately read a second time a tax-bill, so impolitic in its spirit, so unequal in its proposed operation, and so novel and incongruous in its provisions, that your petitioners feel bound, not only out of consideration for themselves, but also from regard to the interests of commerce, and of British India in general, to avail themselves of the privilege of approaching your Lordships' honourable House, and of appealing to the *Parliament of Great Britain* to interpose and prevent the present Bill from passing into law; and also save your petitioners from being exposed in future to the risk of similar legislation.

3. The law with which your petitioners and the rest of British India are threatened, is entitled a "Bill for Licensing Trades and Professions"; and your petitioners beg respectfully to indicate to your Lordships some of the leading objections to the Bill, and to refer your Lordships to the draft of the measure, published by authority in the *Bombay Government Gazette*, and which is annexed to this petition in proof of the truth of these objections.

4. I.—The Bill, though professing to be a licensing Bill, is substantially an Act imposing an income-tax of three per cent. upon your petitioners; and it is proposed to assess and collect a tax of so onerous a nature, not according to the methods sanctioned by the provisions of the English income-tax Act, but through the inappropriate and obnoxious machinery of a license to carry on a trade or profession.

II.—The tax, though in point of fact an income-tax, does not touch the income of funded, landed, and other realised property, but is leviable solely on the profits of your petitioners' trades and professions, and the salaries of certain civil and staff employments.

III.—By requiring your petitioners to take out licenses according to classes, and not according to the actual amount of their net profits in trade, a principle has been adopted which must lead to great inequalities in the pressure of the tax upon your petitioners; some of whom will be compelled to pay about three per cent. of their net annual gains, whilst others will incur a tax much less in proportion: besides, inasmuch as the licenses proposed by the Bill arbitrarily stop at a class which represents an annual income of about one lakh and sixty-seven thousand rupees (about £16,700 sterling), certain large and wealthy corporations in India, and some first-rate mercantile firms, will be mulcted in much less than three per cent., and will even pay in some cases no more than a half per cent. on their annual income.

IV.—Again, the tax is leviable (through the medium of a license) upon the petty traders, whose monthly income is under Rs. 6 (or 12*s.*),—a rate of income which on no consideration ought to be subjected to the burden of an income-tax; and this very formidable objection to the Bill appears in a peculiarly odious light when your petitioners find that by the same Bill the salaries of all Government employés which are under Rs. 100 a month are expressly exempted from the tax.

5. But the Bill appears to your petitioners no less obnoxious in its details than it is vicious in principle. Thus, in order to secure that a license shall be taken out by the mercantile and professional classes who are liable to the tax, the Bill provides, that in the absence of proof of a license of the proper amount having been obtained, no contracts connected with the trade or profession of the party offending against the Act shall be enforceable in a court of justice; and the Bill further imposes upon the judge who presides at the trial of actions founded upon such contracts, the duty in every case of ascertaining that the Act has been complied with.

6. Again, the Bill, instead of taking precautions that such an inquisitorial tax shall be levied upon your petitioners

with a due regard to privacy, and in the way least likely to injure their credit, actually provides that the greatest publicity shall be given to the returns on which the assessment is to be made. It vests in an officer of Government the arbitrary power of fixing in the first instance the amount of the license which your petitioners are respectively required to take out, and, in order to fix that amount, it arms him with despotic authority to call for all the books and accounts of your petitioners; and, what appears most strange, not only for the books and accounts of the party to be assessed, but also for those of any third person who may have had any dealings with him. In addition to this, the Bill directs that the names of the persons liable to assessment, and the amount at which they are respectively rated, shall be open to the general inspection of all who are liable to the tax. Finally, to make publicity more inevitable and more offensive, the Bill contains the provision already referred to under which your petitioners, whenever they are obliged to sue in respect of their trade debts, are compelled to satisfy the judge in open court that they hold licenses of the required class.

7. Your petitioners believe, that the unfair and injurious character and tendencies of the Bill must already be apparent to your Lordships; and your petitioners respectfully express their conviction, that an income-tax such as that proposed by this Bill, so partial in its operation, so directly at variance with some of the first principles of taxation, so oppressive in its penalties, and so inconsiderately exposing to public scrutiny the most private transactions of mercantile men, would not be tolerated in the British Isles, nor could possibly become law in England. Finally, the proposed Bill, aiming directly at the growing and important trade of the country, is diametrically opposed to the system of legislation of the present day, which, in place of hampering the resources of the empire, as this proposed measure will certainly do, seeks by every means to develope the industry and trade of the nation.

8. Your petitioners further beg humbly to represent to your Lordships, that they can see no way by which they can in future escape being continually exposed to acts of the Legislative Council of a character equally injurious with the present Bill, except by amending the constitution of the Council itself.

9. Your Lordships are aware, that, subject to a general right of interference on the part of the Home Government and the British Parliament, the Legislative Council has absolute power to impose taxes on the inhabitants of British India, and to make laws affecting the trade and commerce of this peninsula; yet your petitioners, and the rest of the mercantile community of India, though materially affected by their acts, are entirely unrepresented in the Legislative Council. The large and influential body constituting the non-official class in India are never consulted prior to the passing of such measures as affect their interests, nor are they even aware that such measures are in preparation, except through the medium of newspaper reports.

10. Your Lordships are also aware, that the Legislative Council, with the exception of the two Judges of the Supreme Court, is entirely composed of the salaried servants, military and civil, of the Indian Government. Looking to its elements, your petitioners would infer that the objects which its originator had in view were to give a greater air of deliberation to the acts of the executive Council, and to impart more solidity to the enacting of such laws as related to the judiciary system of this country. Had India remained undisturbed by the mutiny and rebellion which have recently convulsed this country, and had the finances of India remained free from any extraordinary derangement, the Legislative Council might have fairly satisfied the objects of its institution. But a crisis has arisen in Indian politics, which, as might reasonably have been predicted, has exceeded the capabilities of a political body whose experience and studies are confined to matters exclusively Indian, or to subjects connected with the judicial department of Government. For the first time since its institution, the Legislative Council is called upon to exercise its powers in a new sphere, by providing for an enormous deficit in the treasury; to deliberate on means for raising a permanent income considerably exceeding the normal revenue of India; and this, too, in a country which is essentially poor, and in which there are great and peculiar difficulties in finding fresh objects of taxation. The matters of finance, on which the Council is now required to pronounce a decision, are such as might well employ the united intelligence and energy of a British

Parliament. It is, therefore, matter of no surprise to your petitioners, that the Legislative Council, placed as it is in so novel and difficult a position, has failed to satisfy the occasion; but your petitioners urge the novelty of its position, the difficulties with which it is so unexpectedly surrounded, and the manifest perplexity which it exhibits, as showing the necessity, at the present conjuncture, of introducing into the Council some additional members, who shall represent the interest of the classes to which your petitioners belong, and whose independent support and advice, on subjects with which they may be presumed to be conversant, would be likely to prove of the greatest advantage to the Government. Your petitioners beg, therefore, humbly to suggest to your Lordships, that the power of imposing new taxes can hardly be safely or satisfactorily exercised by a body composed entirely of members whose training and experience cannot be expected to have rendered them conversant with the many subtle operations and effects of any new and heavy burdens on the commerce and internal resources of a country, and also that the inevitable heavy increase of taxation in India must affect the class which your petitioners represent, to such a serious extent, as to render it not unreasonable that they should ask to have some voice in the imposition of such burdens.

Your petitioners therefore humbly pray your Lordships, that the Parliament of Great Britain may interpose to prevent the said "Bill for Licensing Trades and Professions" in India from passing into law; and also, that your Lordships may take into consideration how the constitution of the Legislative Council of India can be best amended, by introducing into that body a representative element from the non-official classes resident in India.

And your petitioners will ever pray.

(Signed) W. B. TRISTRAM,
Chairman.

From LORD OVERSTONE,
To W. B. TRISTRAM, Esq.

SIR,—I have the honor to acknowledge the receipt of the

petition which you have forwarded to me from Bombay against the Indian License Bill, and I have lost no time in presenting it to the House of Lords previous to our adjournment for the approaching Easter recess. In discharging this duty, I urged upon the House the importance of the subject to which the petition referred, and the claims to respectful attention arising from the importance of the public meeting in which the petition originated, as well as the number and respectability of the petitioners. The Duke of Argyll, on behalf of the Government, stated that the Act against which the petition was directed had been withdrawn, and another substituted, from which the objectionable provisions had been expunged.—I have the honor to be, &c.,

(Signed) OVERSTONE.

Carlton Gardens, London, 31st March 1860.

No. 49 of 1860.

To J. S. WHITE, Esq.

DEAR SIR,—By direction of the Committee of the Chamber of Commerce, I have the pleasure to hand you enclosed copy of a letter received by W. B. Tristram, Esq., from Lord Overstone, referring to the petition to the Houses of Parliament, of which you were kind enough to undertake the preparation.

It will doubtless have been a satisfaction to you, and others who took an active part in the movement against the late ill-considered Act of the Legislative Council, to have observed the weight that has evidently been attached to the representions of this community, the obnoxious Bill having been withdrawn, and there being every probability that the recommendations embodied in the petitions, relating to the remodelling of the Legislative Council, will be shortly carried into effect.

Before leaving the subject, the Committee desire me to to express to you their conviction that the careful elucidation of the matters set forth in the petitions prepared by you has contributed greatly to the favourable reception that has been accorded to their representations.

At the Special General Meeting of the Chamber held on the 4th instant, the following resolution was unanimously passed:—

Proposed by G. Hamilton, Esq., seconded by W. Sim, Esq.,—"That the thanks of the Chamber be presented to J. S. White, Esq., for his gratuitous services in preparing the petitions to Parliament and the Legislative Council of India against the License Bill."—I remain, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 10*th May* 1860.

APPENDIX I.

STAMP ACT.

To the SECRETARY to the CHAMBER OF COMMERCE,
Bombay.

DEAR SIR,—I have the pleasure, by desire of the Madras Chamber of Commerce, to forward, for the information of your Committee, copy of a letter addressed by the Chairman to the Clerk of the Legislative Council, on the provisions of the Draft Stamp Act for India.—I am, &c.,

(Signed) B. CARDOZA,
Secretary.

Chamber of Commerce, Madras, 6th October 1859.

To W. MORGAN, Esq.,
Clerk to the Legislative Council of India.

SIR,—I am desired by the Madras Chamber of Commerce to address to you the following observations respecting the Draft Stamp Act now before the Council.

2. The Chamber assumes the necessity, which may at present exist, for raising additional revenue; a condition which it keeps in view while remarking on the provisions of the Act, and recommending alterations in particular parts of it. The suggestions put forth in this letter are made in the hope that in many cases they mayprove, from their suitability to the circumstances of the case, to be more productive to the State than those parts of the Act which they propose to amend.

3. Looking at the general principles of the Bill, I am desired to state that the stamp charges generally are considered to be fixed too high. A fundamental rate of half an anna would probably yield more revenue than that of one anna. It would be less frequently evaded, especially by Natives.

4. The Chamber strongly recommends that bill stamps should be at the English rates, and that the scale of advance should also be the English one. It also suggests that other commercial stamps, such as those on bonds, loan mortgages, &c., should be modified on this basis.

5. On looking through the clauses and schedules of the Act, the Chamber desires to remark as follows:—

In Schedule A,—Does the tax on agreements include what are termed sale notes, or contracts for produce or imported goods? Such contracts are free from stamp duty in England, and the imposition of one in this country will be a great harassment and impediment to trade. In cases of sales to arrive, and the loss of the vessel or damage of the goods, the stamps would be lost.

The Chamber protests against a stamp on the acknowledgement of a closed account, it being bad public policy to throw any obstacle in the way of the use of such documents,—thus promoting a cause of litigation.

Letters of credit are not taxed in England, and if they are to be so in this country, many cases will occur where both the letter, and the bill drawn under its authority, will have to be stamped. The Chamber suggests that only such credits as in themselves operate as bills of exchange be subject to tax.

No. 9 in the schedule is unintelligible to the Chamber.

No. 10,—Is it intended to tax a bill of lading at eight rupees? It reads so, although the term "bill of lading" is not used. The Chamber suggests a stamp of two annas on each copy of a bill of lading.

Charter parties are usually in quadruplicate; each copy might be fairly taxed with one rupee instead of the intended stamp of eight rupees, which is excessive.

In No. 37, the Banks of Bombay and Madras are not mentioned. Loans and credits at the chartered banks are, by law, for three months only. The constant renewal of these obligations, with stamp duty as proposed, will be

most onerous on the trading community, and the Chamber records its earnest protest against it. Those transactions differ materially from ordinary mortgages, which run any time.

A stamp on life policies is objected to, as a tax on prudence.

A tax on fire insurance would not be so objectionable.

Is No. 43 intended to stamp acknowledgements of money received on deposit in a banking account? It would be very politic to exempt these, as otherwise it will become the practice, as in England, to give no receipts for such payments,—a result to be deprecated.

Are interest orders for Government securities to bear a stamp? The general exemption in No. 45 seems to include them.

6. The Chamber considers a stamp on bank notes to be highly impolitic in this country.

7. Spoiled stamps should be refunded, for any amount, however small.

8. Under the English Act, agreements between master and servant are exempt; and the same is recommended for this country.

9. The Chamber suggests that the Act should not be put in force until the dies are received from England, and ready for use.

10. Having thus briefly touched upon the points which appear to affect more particularly the mercantile community, I am desired to express, in most respectful terms, the hope that the views of the Chamber may receive the consideration of the Council, and that due inquiry will be made, and deliberate care taken, so that no hasty legislation on the subject may be permitted to pass, to the injury of the great commercial interests of this country.—I have the honor to be, &c.,

(Signed) H. NELSON,
Chairman.

(True copy)

(Signed) B. CARDOZA,
Secretary.

No. 3978 of 1859.

Revenue Department.

To H. Brooke, Esq.,
Secretary to the Chamber of Commerce.

Sir,—I am directed to request that the Chamber of Commerce will favour the Right Honorable the Governor in Council with any remarks that they may have to make on the proposed Stamp Bill, a draft of which has appeared in recent issues of the *Government Gazette.*

2. His Lordship in Council would be obliged by the Chamber replying at their earliest convenience, for it is expected that the Select Committee on the Bill will report about the 20th instant.—I have the honor to be, &c.,

(Signed) B. H. Ellis,
Acting Secretary to Government.

Bombay Castle, 7th October 1859.

To the Honorable the Legislative Council of India.

The Memorial of the Bombay Chamber of Commerce.

Respectfully Sheweth,—That your memorialists have attentively examined the proposed "Bill to Consolidate and Amend the Law relating to Stamp Duties," and have found some of its provisions ambiguous in their wording, and, from the onerous amount of stamps required, calculated to defeat the object of realising an important revenue.

Section I. of Schedule A, if read literally, and in its most comprehensive sense, would require that the simplest written contract for the sale of goods be stamped the same as required for bonds, or at the rate of a half to one per cent., according to value of the goods sold; but the Chamber can hardly suppose such to be the intention of the clause, as so intolerable and oppressive an interference with trade would practically put a stop to business, the more especially as in most cases goods change hands many times before they reach the consumer, and a tax of one per cent. levied in every instance

would totally annihilate all chance of profit. Your honorable Council will be aware that in England all such contracts are expressly exempted under Act 55, George III., Chapter clxxxiv.

Section XV. is similarly open to objection, as by its provisions it would appear that every memorandum of engagement of freight, every shipping order, mate's receipt for cargo, every bill of lading, whether subsidiary to a charter party or otherwise, and every letter implying an intention to ship cargo, whether at a stipulated rate of freight or at one not yet agreed upon, would, upon every sum under Rs. 1000, entail a stamp on an average of three-quarters per cent.

By Section IV., all bills of exchange, hoondies, &c. are subject to a tax averaging Rs. 1½ per 1,000; and although this rate is not much in excess of the English stamp duties on foreign bills, it would fall with great severity upon the producers, dealers, and subsidiary shippers of goods from the smaller ports to the great marts of the Presidencies. The great difference in the character of the trade in India, as compared with that of Europe, does not, the Chamber would respectfully submit, appear to have been taken into account. Goods in India—at all events on this side—have to be brought great distances, pass through numerous hands, and are paid for at each change of owners by a hoondie on the nearest place of any monied importance. These hoondies are at sights varying from five to sixteen days, and, if liable to stamps, the course of trade would be greatly impeded. But it is nearly certain that such stamps would not be made use of, so that Government would not benefit in the revenue, while the morals of the people would be lowered, by the habit of constant evasion. It appears, however, to the Chamber, that if bills or hoondies of not more than one month's date or sight were subjected to an uniform stamp of one anna, a considerable revenue might be obtained, without any serious inconvenience to trade.

The Chamber is further of opinion, that if charter parties and bills of lading were subjected to stamps of uniform value, say Rs. 2½ for the former and 2 annas for the latter, a much larger revenue would be realised than by the proposed rates, which are so extremely heavy, that, as regards

charter parties at least, they will almost certainly be dispensed with wherever practicable.

In conclusion, the Chamber would suggest that the Stamp Act of England be followed as closely as possible in drawing up a similar Act for India.

And your memorialists will ever pray.

For the Bombay Chamber of Commerce,
(Signed) HENRY SCOTT,
Chairman.

Chamber of Commerce, Bombay, 13th October 1859.

No. 110 OF 1859.

To B. H. ELLIS, Esq.,
Acting Secretary to Government, Bombay.

SIR,—By direction of the Committee of the Chamber of Commerce, I have the honor to acknowledge your letter No. 3978 of 1859, dated 7th inst., requesting the Chamber to state their views with regard to the proposed Stamp Act.

Previous to the receipt of your letter, the Committee had already prepared a memorial to the Legislative Council of India on this subject, and I have now the honor to submit to you a copy, and to express a hope that the views of the Chamber may meet with the approval and support of the Right Honorable the Governor in Council, and that, at all events, so important a measure may not be passed without the grave objections that appear to attach to some clauses of the Bill being previously duly weighed by the Legislative Council.

I have the honor also to enclose a copy of a similar memorial received to-day from the Madras Chamber of Commerce, from which you will observe, that on the subject of charter parties and bills of lading, the mercantile communities of Bombay and Madras have arrived at a conclusion very nearly identical.—I have the honor to be, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 13th October 1859.

No. 4888 of 1859.

Revenue Department.

To H. Brooke, Esq.,
Secretary to the Chamber of Commerce.

Sir,—In acknowledging the receipt of your letter as per margin, I am directed to forward extracts (paragraphs 33 to 36) from a communication addressed on the 6th instant (No. 4851) to the Bombay Member of the Legislative Council of India, from which the Chamber of Commerce will learn how far the Right Honorable the Governor in Council coincides in their views.—I have the honor to be, &c.,

No. 110, dated the 13th October 1859, with accompaniments, regarding the proposed Stamp Act.

(Signed) B. H. Ellis,
Acting Secretary to Government.

Bombay Castle, 8th December 1859.

Extract Paragraphs 33 *to* 36 *from a letter to the Bombay Member of the Legislative Council of India, No.* 4851, *dated 6th December* 1859.

Para. 33. His Lordship in Council would request the attention of the Legislative Council to the representations of the Chamber of Commerce at this Presidency. As a memorial has been presented by the Chamber, a copy of their letter to this Government is not forwarded.

34. I am directed to state, that His Lordship in Council so far concurs with the Chamber, that he would advise the imposition of lighter rates than are set forth in Schedule A. The tax being a new one, it is desirable to have very light rates at first, and, from the working of those rates, inferences and deductions may be drawn, which would enable Government at a future period to raise the rate on such items as may be found capable of bearing extra taxation.

35. With this view, His Lordship in Council would reduce the rates in Clause 4 of the Schedule. An uniform rate would probably be best of all; but if this be inexpedient, the scale might be framed on a basis of one anna per cent.

for all bills, inland or foreign, an uniform charge of one anna being added for each duplicate or triplicate, when the bills are drawn in sets.

36. And also, in regard to charter parties and bills of lading, the substitution of uniform stamps in the former case of eight rupees, and in the latter of four annas, would be a great improvement, as much more simple, and less oppressive, than the rates proposed in the 13th Section of Schedule A.

(True extract)

(Signed) B. H. ELLIS,
Secretary to Government.

Extract of a letter from the Acting Superintendent of Stamps, to Government, No. 594 of 1859.

Para. 10. I do not think it likely that the bankers and merchants will purchase stamped papers for foreign bills, and infer, therefore, that stamped English paper will not be required, except for the purpose referred to in the two last preceding paragraphs. They will, I presume, affix postage stamps, if permitted, unless the amount of the bill be so large as to make this mode exceedingly inconvenient, in which case they will probably send their own engraved bank bills to receive the required stamp.

Extract from Government Resolution No. 2858 of 1859.

The Superintendent should confer with the banks, and with the Chamber of Commerce, on the subject discussed in the 10th paragraph, and report the result to Government.

No. 6 OF 1860.

The Superintendent of Stamps would feel much obliged to the Chairman Chamber of Commerce if he would kindly favour him with his opinion on the above point.

(Signed) J. M. ERSKINE,
Superintendent of Stamps.

Bombay, General Stamp Office, 4th January 1860.

No. 2 OF 1860.

To J. M. ERSKINE, Esq.,
Superintendent of Stamps, Bombay.

SIR,—I have the honor to acknowledge receipt of your memorandum of 4th inst., requesting the opinion of the Committee of the Chamber of Commerce as to the most convenient mode of stamping foreign bills of exchange under the provisions of the new Stamp Act. I am instructed by the Committee of the Chamber to inform you, in reply, that the plan which appears to them most convenient for all concerned, is to have adhesive stamps of various values, to be attached to the document, as its value requires. After the bill has been drawn out for signature, the adhesive stamp might then be crossed by the initials of the drawer, or marked in any other way more convenient. Such a system would have the advantage of rendering unnecessary the keeping in stock stamps of every value likely to be wanted in the course of business, and which would be requisite were stamped paper employed, as, in the case of adhesive stamps, a combination of them attached to the draft could be made to represent any value. It would also save the annoyance to all parties arising from the trouble of recovering for spoiled stamps, as the adhesive stamp would not be applied until after the document was drawn out and ascertained to be correct.

I am also directed to suggest, that with regard to such details, it will probably be found most conducive to the public interest to follow, as nearly as possible, the system in practice in England, as it may be presumed, that where business transactions are so extensive, and the employment of stamps so general, the plan most convenient for all concerned has been devised.—I have honor to be, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 12th January 1860.

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce, Bombay.

DEAR SIR,—Under separate cover, I have the pleasure to forward a copy of the Stamp Duty Bill, with the amendments proposed since its first reading, and you will observe that the use of adhesive stamps for bills of exchange, as recommended by you, has been provided for by Section VII.

With reference to the adoption of the uniform exchange of 2*s.* per rupee, as a standard rate, applicable to all the purposes of the Act, my Committee are of opinion that the provisions of Section IV. Schedule A will be found more convenient.

Bills drawn in sterling are, they conceive, just as liable to duty as bills drawn in rupees; and they are also of opinion that *pro formâ* drafts and bills drawn in India, but sent home for negotiation, are liable to be stamped in this country. (See Sections III. and IX.)

The concluding paragraph of your favour of 17th January has been already replied to.—I am, &c.,

(Signed) H. W. I. WOOD,
Secretary.

Bengal Chamber of Commerce, Calcutta, 14th March 1860.

APPENDIX K.

CUSTOMS DUTIES.

To ROBT. BYNE, Esq.,
Chamber of Commerce, Bombay.

SIR,—With reference to my letter of the 10th May, I am to inform you, that, as the Tariff Act had already passed the Indian Government, this Chamber did not consider it advisable to petition Parliament against it; but that the Council would be glad to receive from the Bombay Chamber any suggestions they can make, as a substitute for the increased duties imposed by that Act, either in the shape of a report or petition to Parliament, to which they will give every consideration and support, should they concur in the views of your Chamber.—I am, &c.,

(Signed) ROBERT TRONSON,
Secretary.

Chamber of Commerce, Liverpool, 10th October 1859.

No. 134 OF 1859.

To ROBERT TRONSON, Esq.,
Secretary to the Chamber of Commerce, Liverpool.

SIR,—I am directed by the Committee of the Chamber of Commerce to acknowledge your letter of 10th October, with reference to the late Tariff Act.

The views of the Chamber as to the impolicy of this Act, both as bearing upon the general trade of this country, as well as upon that of the manufacturing interest of Great Britain, remain unchanged; but until such equitable laws have been devised as may raise the revenue to a near equality with the present heavy expenditure, the Chamber sees but little utility in further protesting against the measure. They will, however, embrace every suitable opportunity of again bringing forward the subject, when its impolicy shall have been proved, by the decrease of imports of manufactured goods, which it may be expected will ensue, from the greater encouragement given to the Native looms, or from the probable rapid increase of spinning and weaving mills, which, there is every reason to believe, will prove a very profitable speculation.—I remain, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 12th December 1859.

No. 4335 OF 1859.

REVENUE DEPARTMENT.

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce.

SIR,—With reference to my letter No. 1157, dated the 28th March last, I am directed to inform you, that Her Majesty's Principal Secretary of State for India has intimated that he is under the necessity of declining to comply with the prayer of the mercantile community of Bombay, for the abrogation of Act No. VII. of 1859, and for the refund of all additional duties collected under its authority.—I have the honor to be, &c.,

(Signed) B. H. ELLIS,
Acting Secretary to Government.

Bombay Castle, 1st November 1859.

No. 2350 OF 1859.

From RICHARD SPOONER, Esq.,
Commissioner of Customs, Salt, and Opium,
To H. BROOKE, Esq.,
Secretary Chamber of Commerce.

SIR,—With reference to the correspondence quoted in the margin, I beg to submit a revised list of goods (on which a duty at the rate of 20 per cent. is to be levied), which I have just received from the Collector of Customs, Calcutta.

Letter from the Secretary to the Chamber of Commerce, No. 71, dated the 1st July 1859, to Government.
Government reply, No. 2605, dated the 6th idem.

2. I solicit that you will have the goodness to state whether you have any objections to offer to the list now submitted.

3. It appears that the revised list now forwarded is (with a few exceptions hereafter to be noticed) unobjectionable, and removes the objections raised by you in respect to the previous list received from Calcutta.

4. I shall now proceed to offer a few remarks on the list forwarded.

5. I have no remarks to offer on any item under the head of spices.

No. 14, Spices.

6. With reference to the items under the heading noted in the margin, I am of opinion that probably No. 32, hooks, No. 33, eyes, No. 52, cords for dresses, being merely materials, and not substantive articles of millinery, should be considered as unenumerated articles, liable only to a 10 per cent. duty.

No. 15, Haberdashery, Millinery, and Hosiery.

7. No. 41, parasols, are, I am of opinion, neither haberdashery, millinery, or hosiery, and, as such, are only fairly liable to 10 per cent. duty as unenumerated items.

8. The levying of a 20 per cent. duty on parasols, and a 10 per cent. duty on umbrellas, would lead to much confusion, as it would be often difficult to decide whether any particular item imported came under the head of "parasol" or "umbrella." Some parasols imported here are very common articles, worth say 12 annas each.

9. No. 46, woollen hose, and No. 48, cotton hosiery, of

course come under the head of hosiery, and, as such, are liable to a 20 per cent. duty ; but I think that this rate of duty should not be applied to common red night-caps, and shirts of the commonest description, and of small value, imported for the use of Lascars, and Natives of the lowest class.

10. With reference to the items noted in the margin, it would probably be desirable that the levy of a 20 per cent. duty should be confined to articles imported from Europe or America in small boxes, jars, tins, or bottles; while the common raisins, and prunes, almonds, and dates, imported from the Persian Gulf in mat bags, for the use of poor Natives, or for distilling, should be charged only duty at the rate of 10 per cent.

Nos. 7, Raisins; 9, Prunes; 12, Almonds; 13, Dates.

11. On a perusal of the items under the above heading in the printed list, it is evident, that it is only intended to levy 20 per cent. on articles of *luxury*.

12. With reference to the items under the heading noted in the margin, No. 1, salt beef, and No. 2, salt pork, *not* being luxuries, should only be liable to a 10 per cent. duty, as unenumerated items.

No. 17, Provisions, Hams, and Cheeses.

13. Commanders of vessels frequently require to purchase a few casks of beef or pork for ships' use, and bitterly complain at being compelled to pay 20 per cent.

14. The same remark is applicable to common *ship* biscuits, and I would propose to confine the levy of 20 per cent. to fancy and other biscuits, imported as luxuries.

15. Large quantities of dried and salted fish are imported from the Persian Gulf, for the use of poor persons, and I would propose, therefore, to allow such common fish to pass under 10 per cent., charging only 20 per cent. on fish imported in tins, or other small packages, for the use of Europeans.

Nos. 14, Dried Fish ; 15, Salted Fish.

16. With reference to the heading noted in the margin, I would propose only to levy 20 per cent. on rose-water *bonâ fide* imported as perfumery, while the common rose-water, imported in large carboys for Native use, should be charged only 10 per cent.

No. 18, Perfumery.

17. I beg to be favoured with the opinion of the Chamber on the list itself, and also more especially in respect to the several items alluded to by me in paragraphs 5 to the end of this letter.

18. A very early reply is solicited.—I have the honor to be, &c.,

(Signed) RICHARD SPOONER,
Commissioner of Customs, Salt, and Opium.

Bombay, Office of Comr. of Customs, Salt, & Opium, 30th Dec. 1859.

To RICHARD SPOONER, Esq.,
Commissioner of Customs, Salt, and Opium, Bombay.

SIR,—By direction of the Committee of the Chamber of Commerce, I have the honor to acknowledge receipt of your letter No. 2350 of 1859, dated 30th ultimo, requesting the opinion of the Chamber upon the revised list of goods liable to the 20 per cent. duty under the new Customs Act.

The Committee fully concur with you in the views set forth in paragraphs 5, 11, 12, 13, 14, and 15, but have to offer some remarks upon the articles treated of in the remaining paragraphs.

No. 15, Haberdashery.—Under this head, the Committee presume it was intended to lay 20 per cent. on articles made up, complete and fit for immediate use, without additional labour; and in this view, they think that such articles as bobbins, tapes, hooks and eyes, buttons, and many other of the enumerated items, being more of the nature of materials to be worked up than ready-made articles, ought to come under the 10 per cent., and not the 20 per cent. category. Parasols, the Committee are of opinion, under the application of the above general rule, rightly come under the higher rate, but they do not see why there should be a distinction in favour of umbrellas, unless under the plea that the lower rate will draw the larger revenue, and 20 per cent. act as a prohibitory duty. The article of common red night-caps calls for the same remark in regard to its coming under the application of the rule as to ready-made clothing: the exemption of such an article could only be made, as in the

case of umbrellas, on the ground of 20 per cent. being prohibitory.

With respect to raisins, prunes, almonds, and dates, the Committee think, that in so far as these may be viewed as articles of food among the Natives, an exception ought to be made. Dates, for example, such as are imported from the Persian Gulf, seem to be almost necessaries of life; but with regard to raisins, prunes, and almonds, it does not seem that they can be treated as necessaries, and, consequently, unless from regard to the revenue to be derived, the Committee think they ought to pay 20 per cent.

The article on which the 20 per cent. duty appears to the Committee most objectionable is that of *sugar*. This must be considered, especially in India, as a necessary of life; and it would appear not to be the spirit of the Act to lay such a heavy impost on other than luxuries. There is also the additional objection, that a tax of 20 per cent. on sugar would certainly act as a prohibitory duty, and thus the Government, instead of being gainers, would be serious losers by the change. Such an impost would also introduce a principle into Indian trade from which it has hitherto been happily comparatively free; viz. the principle of protection, in as far as the sugars of Bengal and the East Coast would monopolise the markets of Western India, and thus a branch of industry followed in one part of the country would be fostered at the expense of the consumers in the provinces where no sugar is produced.

The only other article to be remarked on is rose-water used by the Natives, and imported in large carboys. The Committee can see no reason for the exemption of this import, as it appears to them to be essentially an article of luxury, and a fit subject for the increased tax.—I have the honor to be, &c.,

(Signed) H. Brooke,
Secretary.

Chamber of Commerce, Bombay, 19th July 1860.

No. 292 of 1860.

From Richard Spooner, Esq.,
Commissioner of Customs, Salt, and Opium,

To H. Brooke, Esq.,
Secretary Chamber of Commerce.

Sir,—Your esteemed favour No. 7, of the 19th instant, has been duly received.

Alteration in the rates of duty on certain articles.

2. The suggestions of the Chamber of Commerce were fully approved of, and an amended list of goods to be charged with a 20 per cent. duty was ordered to be printed, and was to have been published this day.

3. In the mean time, however, the Government notification of this day appeared, which not only provides for all which the Chamber of Commerce suggested, but concedes much more than was asked; and hence no amended list is now necessary.—I have the honor to be, &c.,

(Signed) Richard Spooner,
Commissioner of Customs, Salt, and Opium.

Bombay, Office of Comr. of Customs, Salt, & Opium, 20th February 1860.

No. 1776 of 1860.

Revenue Department.

To H. Brooke, Esq.,
Secretary to the Chamber of Commerce.

Sir,—The Government of India having directed a revision of the tariff of customs valuations at this port, I am directed to request that the Chamber will favour Government by nominating three members to sit on a committee, with the Commissioner of Customs, and other members who will be nominated by Government.—I have the honor to be, &c.,

(Signed) B. H. Ellis,
Secretary to Government.

Bombay Castle, 14th May 1860.

No. 53 of 1860.

To B. H. Ellis, Esq.,
Secretary to Government, Bombay.

Sir,—I am directed by the Committee of the Chamber of Commerce to acknowledge receipt of your letter No. 1776, dated 14th inst., and to inform you, that, in compliance with your request, they have appointed Mr. Henry Scott, Mr. John Cassels, and Mr. A. C. Gumpert, to sit on the Committee for the revision of the tariff of customs valuations.—I have the honor to be, &c.,

(Signed) H. Brooke,
Secretary.

Chamber of Commerce, Bombay, 19th May 1860.

[Note.—Mr. Cassels having been unable to accept the office, Mr. Geo. Hamilton was appointed in his stead.]

No. 2499 of 1860.

Revenue Department.

To H. Brooke, Esq.,
Secretary to the Chamber of Commerce.

Sir,—The Government of India propose to appoint a committee in Calcutta to settle a uniform tariff of valuations for all India, and they desire that the Chamber of Commerce here should be apprised of their intention, and informed, that if there should be any merchant of Bombay, either as a resident or a visitor at Calcutta, whom the Chamber would desire to be placed on the committee, or if the Chamber should think it necessary, on their own account, to depute one of their number expressly for the purpose, the Government of India would be glad to be able to meet their wishes.

2. In making this intimation, I am directed by His Excellency the Governor in Council to request that the Chamber will have the goodness to state their views.—I have the honor to be, &c.,

(Signed) B. H. Ellis,
Secretary to Government.

Poona, 12th July 1860.

No. 82 of 1860.

To B. H. Ellis, Esq.,
Secretary to Government, Bombay.

Sir,—By direction of the Committee of the Chamber of Commerce, I have the honor to acknowledge receipt of your letter No. 2499 of 1860, dated 12th instant, with reference to the proposed alteration in tariff arrangements at Calcutta, and suggesting the appointment by the Chamber of one of their members to represent them in the committee which is about to meet in Calcutta for the consideration of this question.

The subject was brought before the members of the Chamber at a late general meeting, and a unanimous opinion was expressed, that a uniform tariff for all India cannot be framed so as to operate fairly at all ports; but that, owing to the difference of value of different articles in places 1000 miles apart, a valuation which would be a fair one in one place must necessarily in many cases be an unfair one at the other. In so far as the assimilation consists in uniformity of weights and measures, and of designations used in the tariff, as well as of the mode of ascertaining the valuations, the Chamber quite approve of the change; and they would take this opportunity of stating their opinion, that the practice hitherto followed in these respects in Bombay is superior to that in Calcutta, and might with advantage be extended to the other Presidencies; but in the matter of the valuations themselves, I am instructed emphatically to express the conviction of the Chamber, that these can only be founded with fairness on the market value of goods at the place where the duty is collected. Of course it would neither be practicable nor desirable to extend this principle so as to have a separate tariff for every port; but the differences in value of many articles in the three Presidencies of India seem to the Chamber to render it necessary that separate tariff valuations should be made for each.

With regard to the appointment of a member of the Chamber to represent their opinions on the Calcutta Committee, I am instructed to inform you, that the Chamber have such perfect confidence in Mr. Spooner, the Commissioner of Customs, who is in possession of their views on this matter,

and who they understand has been summoned to Calcutta to aid that Committee, that they do not consider it necessary to be otherwise represented.—I have the honor to be, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 31st July 1860.

No. 94 OF 1860.

To RICHARD SPOONER, Esq.,
Commissioner of Customs, Salt, and Opium, Bombay.

SIR,—In compliance with your request that the Committee of the Chamber of Commerce would furnish you with a statement of their views as to the principle which ought to be followed in framing a tariff, more particularly for grey piece goods, and also to explain the reasons for their supporting the system hitherto followed in Bombay, both in regard to tariff articles and those charged *ad valorem*, I am instructed by the Committee to hand you the accompanying memorandum, which embodies their views on these subjects. A comparative view of the working of the tariff as framed in Calcutta, and as proposed by the Committee now sitting in Bombay, is subjoined, and from it the superiority of the Bombay system can be seen at a glance.—I have the honor to be, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 1st September 1860.

TARIFF VALUATIONS.

THE object aimed at in charging duty by means of a fixed tariff valuation is to simplify the levying of duties by the Collector, and, at the same time, to collect the impost with the least possible annoyance to the importer. But a fixed tariff valuation can only be, at best, an approximation to the actual value of an article, and the greatest care is requisite, in compiling the tariff, that the actual value of each article,

present and prospective, is taken as the basis for calculation, and that the convenience of the fixed tariff system is not purchased at the expense of any serious deviation from such actual value in the rate at which each article stands chargeable with duty.

The system of arriving at tariff valuations of cotton piece goods in Calcutta, as exemplified below, entirely loses sight of the above principle, and, under it, the grossest injustice would be inflicted on many importers, and the duties levied would hardly in any case represent what they profess to do, viz. an impost of 10 per cent. on the value of each article. But in Bombay, a system has hitherto prevailed which, better than any other, seems to carry out the principle to be aimed at. All the staple articles of grey goods imported have been charged for duty at so much per pound avoirdupois in the tariff; the value of a pound being ascertained by careful examination of the market quotations for the different articles from time to time, and based on that valuation.

It is true, that even such a plan cannot prove a perfectly accurate test of value of an article at the date of import; but, for all practical purposes, it has been found a sufficiently near approximation, and the system has hitherto been acted on without giving cause for complaint.

In the Bombay tariff, grey or unbleached cottons have been divided into several classes, and in each of these classes the different varieties of cloth which bear nearly a similar value in proportion to their weight are grouped, and to each class a tariff value is attached, amounting to so much per lb. As it is the case, that in each of these great classes of staple grey goods the value of a piece of cloth varies but little as regards the work expended on it, and almost wholly depends on the quality of yarn worked up in its manufacture, it stands to reason, that the value of the goods can be readily, and at the same time sufficiently, accurately ascertained, by finding their weight, and that a tax varying with the weight, or, what comes to the same thing, a tax of so much per lb. for each class, will fall equally on all the different varieties grouped under it. By such an arrangement, difference of width in the cloth, difference of texture,—in some cloths close and thick, in others open and loose,—and difference of length of the pieces, are all provided for, and a fair charge for duty is made, varying, justly and equally, in

proportion to the real value of the goods; while, by the Calcutta system, only the last of these variations is provided for, and, by the neglect of the others, the greatest injustice in levying duty must be perpetrated.

Another, by no means unimportant advantage, which the Bombay system possesses, is, that under it the customs authorities have in their hands a simple and easily practised test of the accuracy of importers' statements as to the value of goods to be charged with duty. An experienced officer can tell, almost at a glance, the weight of a bale of piece goods, and thus check the declaration of the party passing the goods; and, in cases of doubt, the matter can always be put to the test by putting the package into the scale.

While such a system as described above is admirably suited for the common description of grey goods, it becomes an inaccurate and mischievous guide to value whenever the nature of the goods is such that the labour expended in their manufacture forms a relatively large proportionate part of their value; as in such a case weight is not a fair criterion by which to judge, and a tariff founded on it would be necessarily unjust. Articles of such a nature cannot be classed together, but each must stand by itself; and though it is, no doubt, possible to attach a tariff valuation to each article, we think, that when the endless variety of bleached and fancy goods, both as regards the labour bestowed in their manufacture, and in the cost of the materials employed, is taken into account, the better course with them is the one hitherto followed in Bombay, viz. charging an *ad valorem* duty.

On the same principle, grey jacconets and mulls are *ad valorem* articles in the Bombay tariff, because their value is affected by other considerations besides difference of weight.

China silk piece goods stand in the same position.

Woollens, owing to the difference in the quality of the material, and the variety of their value in consequence, could not be justly charged with duty by weight, as such difference in quality does not necessarily entail a difference in that respect.

There are a few articles included under the head of bleached goods, such as white shirtings, which might, perhaps, be charged with duty by weight, without any great risk of injustice; but the quantity of goods of this descrip-

tion which could fairly be dealt with in that way is not great, and taking certain peculiarities belonging to this branch of trade into account, we think it would be better that all bleached goods should, as is not at present the case in Bombay, be admitted under an *ad valorem* duty.

In the case of yarns, owing to the custom of the trade to divide this class of goods into distinct counts or numbers, it has been found in Bombay that the duty is sufficiently accurately charged by placing a tariff valuation of so much per lb. on each successive number, such valuation being ascertained, as in the case of grey goods, by a careful comparison of market quotations. The charging of duty at so much per English pound avoirdupois, as in Bombay, seems to be preferable to the Calcutta system of charging duty by the morah, so far as regards the choice of a term for universal application throughout India, seeing that the English weight is one familiarly known and understood in all Indian commercial marts, while the morah is a term confined to one part of the empire, as regards its familiar use, and is quite unknown in commercial transactions in this Presidency.

Chamber of Commerce, Bombay, 1st September 1860.

Table showing the application of the Calcutta Tariff to sundry varieties of Grey Piece Goods; and those proposed by the

GREY PIECE GOODS.	Market Value in *Bombay* on 1st August 1860.	Nett Market Value, 18 per cent. being deducted.	Duty per Piece under Calcutta Tariff.	Relative proportion of Duty to Nett Value.	Duty per Piece under proposed Bombay Tariff.	Relative proportion of Duty to Nett Value.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Per ct.	Rs. a. p.	Per ct.
Shirtings, 40 in. 38 yards, 5 lb.	3 1 0	2 8 2	0 7 11	19.71	0 4 6	11.20
Do. „ „ 6 lb.	4 0 0	3 4 6	0 7 11	15.08	0 5 5	10.32
Do. „ „ 7 lb.	4 14 0	4 0 0	0 7 11	12.37	0 6 3	9.89
Do. „ „ 8 lb.	5 14 0	4 13 1	0 7 11	10.27	0 7 2	9.30
Do. „ „ 9 lb.	6 9 0	5 6 2	0 7 11	9.18	0 8 1	9.38
Do. „ „ 10 lb.	7 4 0	5 15 2	0 7 11	8.32	0 9 0	9.46
Jacconets, 39 in. 20 yards, 2 lb.	1 4 0	1 0 5	0 3 7	21.82	ad val.	....
Maddapolams, 32 in. 24 yards, 2½ lb.	1 14 0	1 8 7	0 3 7	14.57	0 2 3	9.15
Do. „ „ 3 lb.	2 4 0	1 13 7	0 3 7	12.11	0 2 9	9.30
Do. „ „ 3½ lb.	2 10 0	2 2 6	0 3 7	10.38	0 3 2	9.18
T Cloths, 30 in. 24 yards, 6 lb.	3 8 0	2 13 11	0 5 0	10.88	0 4 6	9.80

EXPLANATION OF THE ABOVE TABLE.

The date 1st August has been taken for quotations, as being the latest on which we have information as to prices from Calcutta and Manchester.

The 18 per cent. deducted from market value, in order to give the correct nett value subject to taxation, is made up as follows :—

Duty .... 9 per cent.—This forms a fair deduction, as duty cannot be chargeable on duty; 9 per cent. is deducted from the gross value, as the duty of 10 per cent. is levied on the nett.

Discount.. 1½ per cent., as it is the cash value that is chargeable with duty; and as in cash sales 1½ per cent. must be allowed, that amount seems to be a legitimate deduction.

Chamber of Commerce, Bombay, 1st September 1860.

with a Comparative View of the Duties as proposed by the Collector of Customs at Calcutta, Bombay Tariff Committee of 1860.

Market Value in *Calcutta* on 1st August 1860.			Nett Market Value, 18 per cent. being deducted.			Duty per Piece under Calcutta Tariff.			Relative proportion of Duty to Nett Value.	Duty per Piece under proposed Bombay Tariff.			Relative proportion of Duty to Nett Value.	Cost in *Manchester*, with 11 per cent. of Charges added, Exchange at 2*s*.			Duty per Piece under Calcutta Tariff.			Relative proportion of Duty to Value.	Duty per Piece under proposed Bombay Tariff.			Relative proportion of Duty to Value.
Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Per ct.	Rs.	a.	p.	Per ct.	Rs.	a.	p.	Rs.	a.	p.	Per ct.	Rs.	a.	p.	Per ct.
3	2	0	2	9	0	0	7	11	19.31	0	4	6	10.97	2	15	8	0	7	11	16.60	0	4	6	9.44
3	12	0	3	1	3	0	7	11	16.07	0	5	5	11.00	3	9	0	0	7	11	13.88	0	5	5	9.50
4	10	0	3	12	9	0	7	11	13.03	0	6	4	10.42	4	1	4	0	7	11	12.11	0	6	4	9.69
5	10	0	4	9	10	0	7	11	10.72	0	7	2	9.70	4	13	8	0	7	11	10.19	0	7	2	9.22
6	4	0	5	2	0	0	7	11	9.65	0	8	1	9.85	5	11	8	0	7	11	8.63	0	8	1	8.81
7	2	0	5	13	6	0	7	11	8.46	0	9	0	9.62	6	13	4	0	7	11	7.24	0	9	0	8.23
1	6	0	1	2	1	0	3	7	19.81	ad val.			....	1	6	0	0	3	7	16.29	ad val.			....
1	12	0	1	7	0	0	3	7	15.58	0	2	3	9.78	1	10	8	0	3	7	13.44	0	2	3	8.43
2	1	0	1	11	1	0	3	7	13.23	0	2	9	10.15	1	12	8	0	3	7	12.50	0	2	9	9.60
2	6	0	1	15	2	0	3	7	11.49	0	3	2	10.16	2	3	4	0	3	7	10.14	0	3	2	8.96
3	4	0	2	10	8	0	5	0	11.71	0	4	6	10.54	3	3	0	0	5	0	9.80	0	4	6	8.82

Landing, storing, & deliv. } 1 per cent.—This expense must be incurred before the value of the goods can be realised, and therefore forms a fair deduction from proceeds.

Brokerage..... 1½ per cent. }
Commission ....5 per cent. } These two charges must also be incurred in order to effect a sale; and besides, as they are earned by Indian houses, they appear as part of their income assessed for income-tax, and, unless deducted from the taxable value of the goods, would thus pay tax twice to the Government.

18 per cent.

In calculating the duty by the Calcutta tariff of so much per yard for each article, 38 yards is taken as the length of grey shirtings.

The addition of 11 per cent. to prime cost in Manchester consists of freight, insurance, packing and shipping charges, and commission, which may be held to average that percentage, and which form a fair addition to the cost price of the goods in estimating their value.

APPENDIX L.

PAPER CURRENCY DRAFT.

No. 80 of 1860.

To B. H. Ellis, Esq.,

Secretary to Government, Bombay.

Sir,—By direction of the Committee of the Chamber of Commerce, I have the honor to forward to you the accompanying documents relative to the Paper Currency measure proposed for India by Mr. Wilson, The question has engaged the anxious attention of the Chamber, as evinced in the recorded minutes of many of the members, as well as by the discussion which took place at a general meeting of the Chamber summoned for the purpose of considering the subject. The result of that discussion you will learn from the tenor of the resolutions passed at the meeting, and I have to request that you will forward a copy of the printed minutes, and of the resolutions of the Chamber, to the Supreme Government at Calcutta, as the expression of the opinion of the Chamber of Commerce of Bombay.—I have the honor to be, &c.,

(Signed) H. Brooke,
Secretary.

Chamber of Commerce, Bombay, 31*st July* 1860.

To the MEMBERS of the CHAMBER OF COMMERCE,
Bombay.

GENTLEMEN,—I am directed by your Committee to forward to you printed copies of a letter received from Messrs. Wm. Nicol & Co., relating to the proposed Currency Act of Mr. Wilson, with the minutes thus far obtained.

The great delay in obtaining the views of the Chamber, occasioned by the circulation of the papers to each member consecutively, has induced the Committee to adopt this course.

As it is very desirable that the opinion of the Chamber on the question should be ascertained by an early date, members are requested to send to the Chamber their recorded views with as little delay as possible.

The pamphlets by "Scotus" and Mr. Nelson have been placed on the table of the Chamber for reference by the members.—I remain, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 15th June 1860.

To H. BROOKE, Esq.,
Secretary Chamber of Commerce.

DEAR SIR,—The Bombay Chamber of Commerce has not yet expressed any opinion on Mr. Wilson's proposed Bill for the creation of a Government Bank of Issue.

Silence on a subject so important can only be assumed to imply approval, which, if it exist at all, is at least far from being unanimous.

We think it very desirable that the subject should be discussed; and would suggest, therefore, that the Members of the Chamber be invited to express their opinions upon it.

There can, we conceive, be little diversity of opinion as to the policy of extending a Paper Currency in this country; but we think the means proposed by Mr. Wilson for effecting this object are open to grave objection.

We hold, that no Government having any care for its credit will itself undertake the issue of paper-money.

The issue of notes is a highly dangerous power in the

hands of any Government; and is especially objectionable in this country, where Government is practically despotic.

The highest financial authorities have condemned the practice of Government issuing notes, and even Mr. Wilson has expressed his disapproval.

We would suggest a few points for the consideration of the Chamber :—

1. Whether it be not highly inexpedient and dangerous, that the exclusive privilege of issuing paper-money in India should be given to a Government department ?

2. Whether the proposed means for securing the convertibility of the notes issued be sufficient, viz. reserve of one-third bullion, and investment of two-thirds deposits in Government Securities ;—whether it be not more than probable, that the same causes which will produce a run on the Bank, to cash notes, will at the same time have the effect of depressing, and perhaps rendering unsaleable, the Securities on which the convertibility of two-thirds of the notes depends ?

3. Whether it be not for the advantage of the commerce of this country, that the power to issue notes be conferred on one or more establishments, independent of Government, only so far fettered and controlled as to insure the integrity of their issues ; such establishment having, at the same time, the right to undertake ordinary banking business ?

4. Whether the withdrawal of their present rights of issue from the three Presidency Banks, in curtailing the means at their command, be not calculated to injure the mercantile community, by the reduction of the facilities hitherto afforded by the Banks ?

5. Whether Government might not secure the profits of the circulation, which they are now so evidently craving after, by other and more legitimate means ; as, for instance, by stamps on the notes issued, or by arranging with the Banks of Issue for a share in their profits ?

We give, in conclusion, a few quotations from standard authorities :—

McCulloch says,—"Assuming for a moment that the power to issue notes is vested in Government Commissioners, it is not pretended that these notes are to be legal tender. Nothing so monstrous as that could be thought of, or, at all events, durst be proposed."

Adam Smith says, with reference to a State Bank, that—"Government ought to employ an agent safer and more independent than its own. No Government should undertake a task that can be as well accomplished by private agency, and in a simpler and more natural manner; still less should a Government venture upon functions which it is ill fitted to execute, in substitution for a commerical body, acting upon sound commericál principles."

Lord Overstone says,—"Great danger may be apprehended from associating in the mind of the people the pressure of monetary contraction with Government responsibility. Weak or dishonest Governments may yield to the pressure to which they will of course be subjected, and seek to obviate political difficulties, or seek to promote their own temporary popularity, by a fatal tampering with the solidity of the system."

Mr. Norman, before the Banking Committée 1856-57, said,—"It would be expedient that the paper should be issued by a body or corporation in some way distinct from Government. If we look at the history of all Government issues, we shall find they have had all but one termination, namely *insolvency*."

Mr. John S. Mill, before the same Committee, said,—"If it were thought that there should be one Bank of Issue, I do not think that Bank of Issue should be Government itself; I think the currency should not be provided by Government, but by some such establishment as the Bank of England, the public making a bargain with it for so much of the profit as they thought they could reasonably require."

We are indebted for these quotations to a pamphlet entitled "Remarks on Mr. Wilson's proposed Bill for the Issue of Government Notes in India," by "Scotus," published in Calcutta, which we commend to the perusal of the Members of the Chamber.—We are, &c.,

(Signed) WM. NICOL & Co.

Bombay, 22nd May 1860.

Minute by Messrs. W. J. Morgan & Co.

We affirm the propositions laid down by Messrs. Wm. Nicol & Co., viz :—

1. That it is inexpedient and *dangerous* that the exclusive privilege of issuing paper-money in India should rest with Government.

2. That the security of *two-thirds* in Promissory Notes of Government will not insure the integrity of the paper-money issued.

3. That it will be for the advantage of the commerce of India, that the power of issuing paper-money be entrusted to one or more establishments, *independent* of Government.

4. That the withdrawal from the Banks at the Presidencies of the right they now enjoy of issuing notes, will be of serious inconvenience to the mercantile community, in curtailing the power of these institutions to afford facilities hitherto at their command.

5. That Government may easily arrive at the profits they seek, and by much more legitimate means, in connection with the issue of bank-notes.

(Signed) W. J. Morgan & Co.

Minute by Henry Brooke, Esq.

The questions opened out by the letter of Messrs. Wm. Nicol & Co. are of so varied a nature, that, at the same time that they cannot be well answered in the negative or the affirmative without qualification, they would require more space for their proper elucidation than can be spared for an ordinary minute.

The opinions quoted by Messrs. Wm. Nicol & Co. have reference, I presume, more especially to the question whether it would be desirable that the *English* Government or the Bank of *England* should be charged with the management of the currency of *Great Britain*; and they cannot, therefore, be quoted with much confidence in a question referring to that of India, where there is hardly one analogous point of comparison. In India we have no Bank of similar antiquity to the Bank of England, and there is but little prospect of our having one for many years that will have anything like the

weight, or even the good management, of the Bank of England. But the management of the Bank of England, although, perhaps, as good and as disinterested as that of any such institution can be, is not by any means faultless. The Directors, taken, as they are, and as they must be, from the commercial classes, are not disinterested; they must necessarily have a leaning to a preference for cheap money, for their own interest, and have an anxiety to lay out the money in their possession as extensively as possible, for the purpose of increasing the dividends of the shareholders; the natural tendency, therefore, must be to reduce the reserve below a safe point, and to delay, as much as possible, a rise in the Bank rate. In 1847 and 1857, the crises were very much intensified by this course, in the former case by the circumstance that many of the Bank Directors were engaged in immense speculations in grain, and other less legitimate speculations, upon which a rise in the Bank rate would have told with ruinous violence; and when at length the evil day could be no longer delayed, it was found that the Governor of the Bank, and the Directors Sir John Rae Reid and Mr. Gower, representing the eminent firms of Robinson & Co., Reid, Irving, & Co., and A. A. Gower, Nephews, & Co., were obliged to succumb, and, if I recollect rightly, the dividends that were ultimately paid revealed a state of hopeless insolvency. In both these crises, the Government had to come to the rescue, and suspend the Charter Act, which was then assailed as insufficient to guarantee the integrity of the note circulation; whereas the real difficulty was in finding men sufficiently experienced, and at the same time sufficiently disinterested, to carry out its provisions. If this difficulty is found insuperable in England, what prospect is there of finding a remedy in India?

But in India we have no such Bank, and, as I said before, there is no prospect of our having one within a reasonable period; it therefore appears nearly useless to ask whether, if we had such a Bank, it would be wise on the part of the Government to avail themselves of its agency?

The next question would appear to be, whether, with a despotic Government, it is desirable that this power should be further increased by the exclusive right of issue of paper-money? With all due deference to the high authori-

ties quoted, I am disposed to believe, that the greater the *moral* power of the Government, the less will be the necessity of its maintaining so great a *material* power as at present, and the greater will be the probability of a reduction of our import duties and our prospective income-tax.

If, therefore, I am right in the conclusion that there is no agency available for the issue of notes but the Government itself, and if it be desirable that the moral power of the Government be increased as much as possible, there remains only to consider whether the present scheme is applicable to the purpose for which it is intended?

I must confess, that I should have preferred that all Government notes, wherever issued, should have been made receivable for revenue in all parts of India (and I cannot readily find a reason why they should not be); still, as the notes of each circle are receivable for revenue in the circles adjoining, and as the total number of circles in the Presidencies of Bombay and Madras are only seven, Bombay and Madras notes will be nearly exchangeable at par in almost any part of these territories. I do not refer to Bengal, as it may be presumed the Supreme Government are well acquainted with its wants.

Even with the "legal tender" confined to each circle, there can be no doubt that the convenience to the public will be very great; and it seems almost unreasonable that we should debar ourselves of these conveniences from a fear that at some future time the pressure on the Government may be so great as to induce them to tamper with the integrity of the Commissioners. In the present case, the immediate advantages are clear and unmistakeable, and the disadvantages purely speculative—surely remote, and may never take place at all.

The great speculative difficulty is a run on the Commissioners, in consequence of some great national convulsion, and their inability to redeem their notes in cash. In so great a convulsion as would bring about such an effect, I should not see much objection to a suspension of specie payments, when the notes, if not excessively redundant, would still be used as currency, and specie become a mere article of trade. There was no inconvenience of any consequence felt in England during the long suspension of specie payments; business went on pretty much as before—some individuals gained a

little and others lost; but it was by no means a national calamity, as some writers would lead us to suppose.

As regards the proportion of bullion to circulation, I am disposed to believe that it is amply sufficient, as we have never seen the circulation of notes of the Bank of England decline to a greater extent than ten per cent.,—and must bear in mind that the one-third bullion is the *minimum;* and it by no means follows that the Commissioners will ever be able to avail themselves of it to its full extent, as the investments will only be made in the Presidencies, while the revenue payments will be taking place all over the country, and will necessarily be made chiefly in silver coin.

I am disposed to regard the present agitation as in a great measure a *Bank* question; and had it not been for the three Presidency Banks, we should have heard nothing about it. It is clear that these Banks are not *entitled* to any compensation; but, as a matter of policy, it would seem only fair to the shareholders, that their property should not be injured, even for the good of the community at large, if a simple remedy can be found; and I would suggest that this remedy might be applied in the form of a permission to receive from the Commissioners, on the deposit of Government Securities, Government notes in exchange for their own, as they become withdrawn from circulation.

I regret to have occupied so much space in stating my opinion on this subject; but as I feel very strongly that the Government measure is deserving of the fullest support from the mercantile community, I am unwilling to confine myself to a simple expression of dissent from the proposition of Messrs. Wm. Nicol & Co.

(Signed) H. Brooke,
Alex. C. Brice & Co.

I have stated my views in the first person, as I am unable to ascertain the opinion of my partner on the subject.

Minute by Messrs. Ritchie, Steuart, & Co.

The great desirability of a Paper Currency for India is admitted by all, but to the scheme proposed by Mr. Wilson

numerous objections are urged, both as to the broad principle on which it is founded, and as to the details which have been laid before the public. These have been somewhat mixed up together, but they ought to be kept distinct. The objections to details, and these are numerous and grave, might probably be urged with equal force against any other system as against Mr. Wilson's. The difficulties, to overcome which these details were devised, would exist whether the paper currency were issued by the State, or by an establishment distinct from it.

The great question is, whether the issue of the paper currency should be undertaken by the Government at all, or whether it would not be better in the hands of a Bank, or system of Banks, independent of Government, but closely connected with it, and recognised by it, as is the Bank of England by the Government at home. Mr. Wilson (vide paragraph 3 of Government pamphlet) starts with the assumption, that it would be impossible to establish such a Bank in this country, and, therefore, that Government must itself issue the notes. This appears to be almost an admission, notwithstanding what he has said elsewhere, that, if it were possible, it would be better to have the issue made by some body distinct from Government. The impossibility is by no means certain; indeed, it appears to us, that, certain privileges being granted by Government, a Bank might be framed, or existing Banks might be extended, so as to effect the desired object—not, perhaps, so quickly, but in time as effectually, as this could be done by the Government machinery proposed. The fact of time being spent over the operation—the extension of the circulation being a gradual process—is of itself no small advantage; surely it would be infinitely better that the circulation of paper-money should extend itself gradually (it would, we believe, do so rapidly also), by its own merits, by force of the conveniences and advantages to the public, which would soon become generally recognised, than that it should at once be *forced* upon the people, by a Government issue. It is perfectly certain, that the proposed issue would be in fact *a forced issue*, and this fact alone appears to be an insuperable objection to it. Page 22 of Scotus' pamphlet shows this most clearly. Circulation is a source of profit, and a Bank would therefore have every inducement to extend this (within such limits as might be

prescribed) so far and as fast as might be consistent with safety.

The grave objections which exist to Government, under any circumstances, taking upon itself the issue of a paper currency, are very ably urged in the pamphlets before us, and we agree almost entirely in the statement of those proposed for our consideration by Messrs. Wm. Nicol & Co. We need not recapitulate them. By whomsoever the notes may be issued, it is almost certain, notwithstanding the everlasting certainty of immediate convertibility of which Mr. Wilson speaks, that periods of great pressure will occur, when a suspension of specie payments will become necessary ; and would it not be infinitely better, under such circumstances, that Government should relax the existing law in favour of a body distinct from itself, than that it should have to do this for *its own relief*? It would be of the utmost importance that Government should not become involved in, or rather should not become the object of, the suspicion and want of confidence which would at such times exist.

Again, is it not clear that it would be better to entrust the management of a Bank of Issue to men of experience, responsible to a proprietory body, and to public opinion, than that it should be given over entirely to nominees of Government, responsible to Government alone, who would, by a large portion of the community, be considered as mere servants of Government, and as bound to consult its interests only—who would, we fear, in many instances look upon themselves in this light; and whose first and great object would, in all probability, be to extend, by every means in their power, the circulation, which, if forced too fast, would only precipitate the dangers which prudent management might avoid?

Mr. Wilson is a very high authority; but, after considering all the arguments which have been laid before us, supported, as these are, by as high authorities certainly, and attempting upon these to come to a common-sense conclusion, it appears to us clear, that the issue by Government of a State Paper Currency would be attended by no advantages as compared with the properly authorised and regulated issue of notes by an independent Bank; but that, on the contrary, it would be attended by great disadvantages:

by danger to the Government itself; and by greatly increased risk to the public credit.

A paper currency is wanted, and the discussion of the question now may, perhaps, soon give it to us in a safer form than that now proposed. There is no great hurry, no pressing necessity, as in the case of the income-tax, and a step of such vast importance should not be taken without much consideration and discussion. It would be better to be without a paper currency for some time longer, than to accept one, the principle of which we believe to be impolitic and dangerous.

This minute is already far too long, and we shall say nothing about the details of Mr. Wilson's scheme. Some of these are, we think, objectionable, and some would probably be found to be impracticable.

(Signed) RITCHIE, STEUART, & Co.

Minute by Messrs. Campbell, Mitchell, & Co.

WE think there can be but one opinion as to the desirability of some means being adopted whereby India may be saved the very large sum which she is now paying for her metallic currency, and the country itself have the advantage of supplying its circulating medium; and by which, at the same time, the medium may be safely increased in amount, so as to promote and extend the advantages of trade.

The question only remains,—how is this to be done most effectually and safely?

Although the object of the present circular is formally to discuss Mr. Wilson's measure, we think we are not going beyond our province, but rather promoting discussion, by devoting these remarks chiefly to a comparison between Mr. Wilson's measure and the substitute for it most generally proposed. With many of the remarks made by those who have expressed their opinion before us, as to the faults in the Government scheme, we are inclined to agree in principle, though we think the dangers to be apprehended are somewhat exaggerated.

The position of the British Government in India is very different from that of the Government at home, (although we

are too apt to view the question by the light of authorities who wrote and gave their evidence exclusively in reference to the English currency,) and we feel confident that any great national movement, such as the introduction of a paper currency, must at present, and for a long time to come, originate with, and be undertaken by, the Government, in order to be successful. The Indian Government alone can instil into the minds of the people that amount of confidence which such a movement requires. It is all very well to say that their financial proceedings hitherto have not tended to promote public faith; but still the confidence of the natives of India in their natural rulers is very far ahead of the trust which they would repose in any national Bank or other corporation not immediately under the control, or possessing the absolute guarantee, of the Supreme Government of the country. On this ground, we think, that if a paper currency is to be widely introduced, so as to spread over the whole country, and, in short, be a success, Government alone can take it in hand.

With regard to the superior advantages of placing the management of a paper currency in private hands under the supervision of Government, we think that, in the case of India, these are more apparent than real. The supporters of such a scheme say, that the holders of notes would have better security—that the notes would be issued against other securities less liable to political derangement than Government paper; that the interests of the Bank would be watched over by men experienced in the ways of the money market; that, being to a certain extent independent of Government, the Bank would be less likely to be affected by political accidents, and less exposed to the possibility of the issues being tampered with by a needy or unscrupulous Government.

Now, we question very much whether the security would be better. It might be, that a part of the Bank's funds would be commercially invested, so to speak,—that is, used in discounting mercantile bills. But the Charter of the Bank would necessarily tie down the Directors not to lend their funds except on *bonâ fide* bills,—that is to say, on bills having for their basis a real mercantile transaction, which is the rule at home. We all know very well, that the nature of business on this side of India, at any rate, is

such, that the discounting of such bills alone would give but a small outlet for the Bank's funds; and the experience of the present established Banks shows that the great bulk of their discount transactions are for merely speculative purposes, and partake chiefly of the character of accommodation paper, the only security for which is generally Government paper. Such being the case, a Bank, constituted in the way proposed, would have either to take in deposit against its discounts the paper of the Government, or to hold its funds to a great extent in coin, unemployed. In the former case, it would be placed in exactly the same difficulty as a Government Bank in times of political crisis, and in the latter it could not be doing a profitable business, and, consequently, would have no inducement to extend the benefits of an increased currency. We may be wrong; but we think the number of *bonâ fide* bills discounted by such a Bank would be comparatively small, and that the Directors would be driven to use Government securities as an investment for by far the larger portion of their funds, or, what amounts to nearly the same thing, to hold these as security for monies lent. The history of the Bank of Bombay bears us out. We would ask, has its business in real mercantile bills been at any time as extensive as was expected? On the contrary, has its business not been almost entirely in bills notoriously speculative, generally amply secured, it is true, but that security consisting of that very Government paper which is complained of as not sufficient in the proposed Government scheme? Is it not the case, that in seasons of difficulty the Bank of Bombay's hands have always been tied, owing to the nature of the securities they held, which has prevented them rendering assistance to any great extent to the mercantile community? Have they not been driven constantly to invest the money, derived from their limited issue, in Government paper, because they could not employ it to so much advantage in any other way? The case of the Bank of Bombay would probably be that of such a Bank as is proposed, the nature of its securities being much the same as those of the Government Bank, while, from its constitution, it is more likely to be affected by any financial derangement in the mercantile world.

With regard to the argument, that more enlightened and experienced men would be at the helm to watch and guard

against coming disturbances in the money market, we have some doubts if it would be so. The mercantile community in India is too busily engaged with its own affairs, and too migratory in its character, to be able to give so large a portion of the time of its best men, and to bring so much experience of the Bank's working to bear, as would be necessary for the successful management of such an important institution. With every respect for the mercantile community, we question if in Calcutta, or even in Bombay! a Board of Directors like that of the Bank of England could be got together. If the management is to be left in the hands of a paid staff, we do not see why the Government may not secure as good men as an unofficial board could do. But, on the other hand, an unofficial corporation would labour under a great disadvantage, from the difficulty of securing first-class men at the outstations, and the expense of establishing branches there, which can always be done so much better and cheaper by Government, who can avail of the services of their own official staff.

Something may be said in favour of the Bank being out of the immediate influence and control of the Government; but we doubt if it is possible that it can be beyond the direct influence of the Government in India, and still be possessed of the requisite amount of public confidence? And even if it was comparatively beyond Government influence, may not this advantage be to a great degree counterbalanced by the weakening of the security, owing to the risk of speculation and losses in the course of mercantile banking business.

As to the risk being less of such a Bank's being tampered with by the Government, we do not think that the difference between the two schemes would be great in that way. It would only be in a very serious crisis that the Government would venture to interfere with a State paper currency, and, when such an emergency occurs, a Bank separate from Government would be in almost as great difficulty as a State Bank, from the general want of confidence and distrust which in such a case must necessarily prevail. As a last resort, Government, if it must have money, will go to the one Bank as certainly as to the other, and in both cases the result would be, that the paper would be declared to be temporarily inconvertible,—in-

the case of the unofficial Bank, it would probably be at the request of the Bank itself; so that, in point of fact, neither the Government nor the unofficial scheme has much advantage over the other in this respect, while the latter, from the nature of its business, is to a certain extent more exposed to the dangers of a commercial crisis than a purely Government Bank would be.

In making these remarks, for the lengthiness of which we have to apologise, we have tried to prove, not that the Government scheme is perfect, but that what is proposed as a substitute is not only equally faulty, but in some respects more so, and that, as the benefits of a paper currency for India are acknowledged, the best way of giving them to the country in its present position, political, social, and mercantile, is through the direct instrumentality of the Supreme Government, as proposed by Mr. Wilson.

(Signed) CAMPBELL, MITCHELL, & Co.

Minute by Messrs. Finlay, Scott, & Co.

WE think that Mr. Wilson's Paper Currency Scheme will, if carried out, be likely to lead Government and the country into serious embarrassment. The holding of two-thirds of its receipts in Government securities seems to us much the same as a Bank making advances upon its own shares,—a practice universally condemned as unsound, and one which we believe no Bank will now adopt. Supposing, in consequence of forgeries, or even the *suspicion* of forgeries, a *run* upon a Government treasury were to take place, the Commissioner of the circle in question, holding a reserve in cash of only one-third of his liabilities, would be quite unable to cash his notes, while, if supplies were sent to him from neighbouring circles, those circles, in their turn, might at once be run upon; and so the panic would spread. In November 1848, there was a run upon the Bank of Bombay for payment of its notes in bullion, in consequence of the discovery of forgeries in the bazar; and in the course of *a few days* about four-fifths of the entire circulation was presented and paid. How likely this to occur up-country; and what

would be the result? The amount of notes cashed by the Bank during the run was forty lakhs. By Charter, the Bank is compelled to hold cash equal to one-fourth of its liabilities, and in case of a run, it can strengthen its reserve by a sale of securities—say Government paper; a recourse which Government, under Mr. Wilson's scheme, would not possess; for to proceed to sell its own securities (known as Company's paper) would cause a depression in their value, which would be an injustice to original holders; and besides, to quote from Scotus' pamphlet, page 23—"who, under such circumstances, is likely a become the purchaser of *Government securities* to replace *Government notes?*" Few would have the disposition to do so, and the non-issuing Banks would, as a matter of course, look to their own preservation, and lock up with as full a reserve as possible."

We are in favour of a paper currency, but only if it is to be under the control of the Government Banks, or the three united in one Bank for all India.

(Signed) FINLAY, SCOTT, & Co.

Minute by Messrs. Heycock & Co.

WE are strongly in favour of a paper currency, but should have preferred that all the issue should have been from one Joint-Stock Bank, of large capital, and having branches in the different provinces of India,—much upon the model of the Bank of England. Next to this, we accept Mr. Wilson's scheme, but much prefer the other.

(Signed) HEYCOCK & Co.

Minute by Robert Angus, Esq., Manager Commercial Bank.

I AM inclined to look upon Mr. Wilson's Currency Bill as the most suitable that can be devised for India.

No Bank note issued from other than a Government source would ever obtain the confidence of the natives. The Government could never permit Bank notes to be made a legal tender, unless the source of issue was entirely under its own superintendence.

Neither the existing Banks, nor any amalgamation or modification of them, could, in my opinion, be safely entrusted to issue and administer a national currency. Arguments, drawn from the adaptability of the Bank of England to English finance, are inapplicable to the case of India.

The primary object of all Banks is, to make profit for their proprietors: one source of profit is deposits, which the Bank trades with, and, in times of pressure, those deposits are the greatest and the most immediate cause of danger. The proposed Government institution is free from this great risk.

The Commissioners are not to be under the control of the Indian Government,—they are responsible only to the English Secretary to the Government of India. I could scarcely imagine a Governor General and his Council who would dare to induce a Commissioner to violate the Act by an over-issue, and thus take the responsibility of probably producing national bankruptcy.

The weak point of the Bill is undoubtedly that which permits the Commissioner to invest two-thirds of his issue in Indian Government paper. There is real danger in this, unless the Commissioner be possessed of sound judgment and business experience, and be permitted to exercise those qualities; but they are only necessary to him in common with every banker, who must foresee and provide against danger, if he would keep his establishment open for a single twelvemonth—nay less necessary, for the Commissioner would have little to do beyond noting passing events, and preparing for emergencies. The duties of his office are the easiest that can be imagined: he receives a box of notes, prepared in London: he does nothing with them till some one proposes to take a part of them in exchange for silver;—that silver he locks up in another box. The notes issued may be looked upon simply as receipts for the silver: should any of the notes be presented for payment, the silver is there, ready. Another and another box of notes is sent to him, and its contents are disposed of in the same manner;—the mint is always at hand to coin his silver into rupees.

If he be a prudent man, he will not invest a single rupee of that silver in Government securities until seasons of prosperity and adversity have practically taught him that a certain amount of silver will remain in his box under all

circumstances; then he may prudently invest a portion of what remained at the worst of times, and go on increasing his investments, as experience shows him that the extending trade of the country, and the increasing confidence of the public in his notes, will warrant such operation; and probably, at the expiry of ten or twelve years, he will feel himself justified in extending his investments to the full two-thirds of his issues. If he attempt to make considerable investments much earlier than I have named, he will discover that the high value of Government securities when he comes into the market as a buyer, and the diminished value when he offers to sell, will exceed the interest he will earn whilst the securities have been held by him, and he will at the same time see that he has jeopardised his position. Except on extraordinary occasions, he ought never to be a seller, and he ought to foresee those occasions, and take time by the forelock.

The real safety lies in the prudence with which the institution is managed; but however well managed, seasons of needless alarm will undoubtedly occur amongst a people so little acquainted with the principles or practice of political economy, and so easily worked upon by disaffected demagogues and fanatics. Should one of those periods of alarm occur at such a time of difficulty as was experienced in Bombay in May of last year, the Commissioner would be entirely helpless, with only Government notes on which to raise money.

I consider two-thirds a very full proportion to be ultimately invested in any kind of security, but much too large if invested in such a capricious security as the Government notes of India; and I would suggest that English Exchequer bills should form a portion of the investment. I would prefer one-third of those and one-third of Indian notes, and I would make the Exchequer Bills a legal tender when the silver had been diminished to some particular point in relation to the circulation, and irredeemable in India, but receivable at all the treasuries for all purposes for which Bank notes or coin would be received. The Chancellor of the English Exchequer would no doubt issue such bills to the Indian Government in exchange for hard money, in such a form as would secure the interest to the Indian Government alone, and not to the individual holder. The

bills would be paid to the public, only in exchange for Bank notes, at 2*s.* per rupee, and would be received back from the public at the same rate—no interest to be calculated on paying or receiving them. They would thus be merely another form of Bank notes, issued during a panic; and as all panics are of short duration, the Government should lose no time in calling them in after the panic had ceased.

The bills would not yield the same profit as Government securities, but I do not think that a circulation is a legitimate source of revenue to a Government; if it can be made to pay the expense of management, that is all that should be expected from it.

I do not by any means expect that the circulation will increase rapidly; in the Presidency towns it will, no doubt, soon equal the notes of the several Banks now in circulation and about to be called in; but I will be agreeably deceived if it increase afterwards by a crore per annum, or if, at the end of ten years, it amounts to ten crores. If I am right, then in ten years, with a circulation of ten crores, and the Commissioners holding four crores in silver, three in Exchequer bills, and three in Government securities, I could scarcely imagine an institution more adapted to the purpose, or one formed on a sounder basis.

(Signed) R. ANGUS.

Minute by Messrs. Grey & Co.

IT is admitted by all, that a paper currency is now one of the wants of the country, and opinion differs only as to the method of introducing it.

We are of opinion, that the Government of India go quite beyond their province in proposing to take this duty themselves, and to work it as a department, avowedly for the purpose of increasing the revenue, by the profits which they anticipate will attend the operation.

We do not believe that they could work such a department either safely or efficiently; and our conviction is strong, that the best course for the preservation of their own credit, for the securing of the confidence of the people, and for the advantage of the great trade of the country, is to en-

trust the power of issuing paper-money to one or more Joint-Stock Banks, conferring such privileges, and placing such salutary restrictions, as experience proves to be desirable and necessary. In the hands of independent men, appointed by, and responsible to, their shareholders, and to the public, the scheme presents to our minds every promise of success.

But we would rather be without a paper currency, than see the issuing and management of it entrusted to any servant of a practically despotic Government, answerable to them, and to them only, for his acts.

(Signed) GREY & Co.

Minute by Messrs. Peel, Cassels, & Co.

THERE can be little doubt, we think, that the introduction of a Paper Currency will materially assist in the development of the commerce of the Indian Empire; and as there appears unanimity of feeling on this point, we think that objections to Mr. Wilson's scheme ought to be advanced with great caution, lest India be deprived of the boon altogether. We venture to remind the Members of the Chamber, that Mr. Wilson was selected, for the performance of a most arduous and thankless duty, from amongst England's choicest men; that he possesses undoubted ability as a financier; and that, on the whole, he is one of the soundest political economists of the day.

We cannot believe that he hastily decided the important question of a paper currency for India, or that he acted solely on his own convictions. We think it more than probable that he consulted the opinions of the most experienced men in England before coming to this country; and though he, and other recognised authorities, have condemned the issue of a currency, by any Government, he has been forced to abandon the objection through the utter impossibility of producing a suitable or adequate substitute.

In consideration of these facts, then, we defer in some measure to Mr. Wilson's superior knowledge and greater experience in all matters of finance; and when he concluded that there were insurmountable obstacles to the establish-

ment of a private joint-stock banking company, competent to undertake the issue of the new currency, and that Government alone was capable of its administration, it must have been after the maturest reflection, and on a consideration of the fact that the exigencies of the State demanded, or warranted, the experiment; and we are inclined to endorse his opinion.

It ought not to be forgotten, we think, that rules applicable to an European community are wholly unsuited to an uneducated Indian population; and we question if the authorities quoted by "Scotus" and Messrs. Wm. Nicol & Co. would now express similar sentiments with regard to the introduction of a Government paper currency for India.

We cannot believe that any Governor General would attempt to tamper with the integrity of the Commissioners, under even the most pressing necessities; and we think, therefore, that there is little fear of the Government abusing the power it will wield if the issue is entrusted to its management.

The formation of a Bank of India, like the Bank of England, is intelligible in theory, but we doubt the practicability of the scheme. Where are we to look for men of capital, willing to assist in an undertaking of this kind, when we hear on all sides that India one of these days may be wrested from our grasp? With the recent statements made by the Governor of Madras and Sir James Outram before the world, relative to the disturbed condition of a vast portion of India, who would be ready to run such a risk? The idea is no more extravagant than that brought forward by the opponents of Mr. Wilson's project,—to the effect, that if the issue is attempted by this Government, insolvency, or some disaster equally terrible, is sure to follow.

A Bank of India, or an amalgamation of the three Presidency Banks, or these establishments as they now exist, must have branches throughout the provinces, if the extension of the circulation is desired; and from whence are we to look for the business which is to cover the expenditure, to return a fair profit to the proprietors, and to remunerate Government, which would be absolutely necessary, for privileges granted.

We argue, therefore, that the establishment of a joint-stock banking company is most doubtful—almost impossible;

that if it were practicable, the profits would be insufficient to meet the disbursements; and that, in the absence of some more feasible scheme, the Government is in the next best position to confer on India the benefit of the new currency paper.

We do not believe that the notes of any private company would enjoy the confidence of the public to the same extent as those of Government, unsatisfactory though its reputation has been of late years.

Having said thus much in favour of Mr. Wilson's proposition, we frankly confess we see some objectionable features in the details of the scheme in its present form. We strongly oppose the retention of only one-third bullion, and the permission granted to the Commissioners of investing the remaining two-thirds in Indian Government securities. This course is fraught with danger to the State.

With reference to the one-third bullion, we think the most stringent orders ought to be given, that under no circumstances whatever should a single rupee be withdrawn from the Commissioners' treasury. Let the entire one-third reserve be always available for any emergency; and with regard to the investment of the two-thirds in Government securities, we deprecate the idea. It is absurd to speak of the convertibility of these debentures in the event of need, as the very same cause which would lead to the demand for cash in return for notes would unquestionably render their sale impossible, unless at an enormous loss. Sir Charles Wood, however, in his despatch, declares that the cash balances in the treasuries and at the Collectorates should be made available for any unforeseen demand for payment of the notes; but will there always be a cash balance even if this rule is established?

If this privilege be taken advantage of to the fullest extent, we do not doubt that the monied interest at any of the Presidencies could collect notes to such an extent that the conversion into silver would compel the Commissioner to suspend payment. This expedient might be resorted to for the simple purpose of depressing Government securities, purely with the object of speculation. When the Commissioners found they had to realise at any price, these speculators would be ready to buy, the run for cash would cease, and, when the panic was over, there would be a hand-

some profit on the adventure. We take it for granted, of course, that the Commissioners, being greedy of gain, would have invested nearly the whole of the two-thirds of the issue.

We think, therefore, that to prevent any such possible catastrophe, positive restrictions ought to be placed on the movements of the Commissioners, and until years of experience have tested the working of the machinery, these investments should be so regulated that not the slightest risk would be incurred.

It would be very desirable that a monthly statement of the operations of each of the circles, and of the Presidencies, be published in the *Government Gazette;* let there be no concealment, and confidence will in due time be secured.

There are other points to which we might refer, but we have already occupied too much space.

(Signed) PEEL, CASSELS, & Co.

Minute by Messrs. Comber, Son, & Co.

IT appears to us, that the questions proposed by Messrs. Wm. Nicol & Co. are best considered under two aspects,—*first*, as involving the principle of Mr. Wilson's Bill; and *secondly*, as affecting its details.

Of the desirability of a Paper Currency for India, there can be no doubt; but opinions differ as to whether the issue of that currency should be undertaken by the Government, or by a bank, similar in constitution to the Bank of England and its branches. We would support the former opinion, on the simple ground that in the Government alone is there, in this country, that perfect public confidence necessary to insure the ready acceptance of the notes by the great bulk of the Natives.

While, however, we agree with the principle of Mr. Wilson's scheme, it certainly strikes us, that one-third of the amount of notes issued is too small a proportion to be fixed as the minimum of the bullion to be held against those notes.

(Signed) COMBER, SON, & Co.

Minute by Messrs. Killick, Nixon, & Co.

THE principal question on which we are called upon to express an opinion is whether a Note Circulation should be entrusted to a Government Bank, or to a Joint-Stock Bank.

In a country circumstanced as India is, we think it ought to be entrusted to a Government Bank.

It is not likely that Government would permit a Joint-Stock Bank the exclusive issue of legal tender notes, except on such conditions as are imposed upon the issue department of the Bank of England, besides receiving at least half the profits.

To secure the note-holder, two-thirds of the minimum circulation would have to be secured by Government paper, and the remainder by bullion. Under such circumstances, we do not think a Joint-Stock Bank would prove profitable.

Any profit made in the Presidency towns would be more than eaten up in the expensive branches in the Mofussil, where there is little or no business that a Bank, whose notes are a legal tender, could safely be permitted to accept.

But, apart from this, we should prefer a note circulation being placed in the hands of Government, because Natives would have more confidence in it, and we believe it would be safer.

Most of the objections raised against a Government Bank may be urged with equal force against a Joint-Stock Bank.

In the cases of suspected forgery and political disaster, there would be no difference; and there are other objections to a Joint-Stock Bank, from which a Government Bank would be free. The greatest, and in India the most probable, is a run on the deposits.

We do not think there is any ground to fear an over-issue. Other Governments have abused a note circulation, as they have tampered with their coin; but the Indian Government has not tampered with its coin, and is not more likely to abuse a note circulation. Accounts will be published periodically, showing the amount of circulation and the reserve of bullion. We cannot conceive that a Commissioner would render a false return; he would be liable to heavy penalties for so doing.

We believe the security offered for the immediate con-

vertibility of the note is ample. If we had a doubt, it would be removed if the proposition of Sir C. Wood is carried out. He writes, in his despatch dated 26th March,—" It should be provided, that the cash balances in the Indian treasuries should be available to meet any unforseen demand for the payment of notes; and arrangements should also be made for establishing credits on the Collectors' treasuries in favour of the district currency Commissioners, for any difference between the amount of their issues and the cash balances in their hands."

It is not to be supposed, that a Commissioner will invest two-thirds of his cash in securities as fast he receives it. The object of a Commissioner will be to make his circle profitable; and he will very soon find that the best way to do this will be to avoid the necessity of selling his securities; for the loss on the sale of securities will in all probability be greater than the interest received: thus he will have a powerful motive not to invest in securities till experience shows him that his minimum circulation is gradually increasing.

Being satisfied that the note is properly secured, and will be paid on demand under any but the most improbable circumstances, we see no objection to Government receiving whatever profit there may be, and spending it for the general good.

We believe Mr. Wilson's scheme to be sound in principle, and the best that could be devised for India.

(Signed) KILLICK, NIXON, & Co.

25th June, 1860.

Minute by Messrs. W. C. Sillar & Co.

WE think no one will deny that a Paper Currency is a very great commercial convenience, and is much wanted in India. We think the Government preferable to any private establishment for issuing this.

In reply to Messrs. Wm. Nicol & Co.'s question 2, we answer " Decidedly not"; and we look with surprise at the proposal.

Stripped of all disguise, it amounts to this: a proposal to force upon the people of India Government paper bearing no interest, instead of that already issued. The idea of Government looking upon *their own paper* as "security" is too absurd to be argued upon.

We maintain, that a paper currency must be founded upon a metallic basis; and any interference with that, even to the extent of one rupee, is a breach of trust. The money belongs to the people, and it is only lodged for safety in Government hands; and they have no right to use one pie of it.

We think Messrs. Wm. Nicol & Co. have named the true views of Government, when they mentioned their craving after the profits of the circulation. It must never, however, be forgotten, that business, giving profits without losses, is unknown, and that Government must expect these. The risk of loss is tenfold when business is carried on on borrowed capital, and this would be the case of Government. Their securities must be sold at any sacrifice, and without warning, the moment the people choose to demand silver for their notes. And even supposing a forced sale were made, at 50 per cent. discount, still the payment would be in bank notes, for they are a legal tender. We see nothing but an inevitable suspension of cash payments, if Government invest the rupees at all.

The probabilities of a panic are greatly increased when the paper currency is for small sums; for these are held by small men, and small men are more easily frightened than wealthy ones; and a rush upon the bank of ten men holders of 5-rupee notes will cause as great a panic as if they had been 5*l.* note-holders.

We cannot see, moreover, in what particular a sale of Government securities would differ from the opening of a new loan; and these constant interferences with the money market would far overbalance any benefit we should derive from a paper-currency.

But we should oppose the measure on the broad grounds that it is not honest to appropriate funds placed with you as security, and because we are strongly of opinion that such a course would end in a smash.

(Signed) W. C. Sillar & Co.

Minute by Messrs. Hastings Hicks, Sim, & Co.

If it is inexpedient under any circumstances that the exclusive privilege of issuing Paper Money in India should be vested in the Government, it is certainly much more so when it is proposed to rest the issue upon such a basis as that laid down by Mr. Wilson; where the *retired liabilities* of Government figure as security for two-thirds of such issue. A few years ago, in a not distant colony, it was customary to reckon the treasury notes in hand as hard cash, in the treasury balances;—an approximation to the system being apparently about to be revived in the present scheme.

Doubtless, so long as matters go smoothly, the issue of a paper currency, as contemplated, will largely assist in developing the resources of the country; but let there, from any cause whatever, be a run upon the treasuries, and it may be found that the temporary prosperity has been dearly purchased. The probabilities of such a run will, we think, be largely increased by the issue of notes of such a low denomination as "Rupees Five," these offering the greatest temptation for a spurious issue, as they will generally circulate amongst a class unable to detect even indifferent imitation. Forged notes once in circulation, general distrust will be engendered, and the probable consequences will be a panic. The loss to Government under a run upon the treasuries would be severe, but the evil thus suffered would be light compared with that inflicted on the public generally, by the sudden contraction of the ordinary trading facilities, and the depreciation or utter unsaleableness of the Government securities they might hold.

An issue of notes to a similar amount by a properly authorised bank is not liable to the objections to which such an issue by Government itself is open; the securities it would have to offer not being its own retired liabilities. The assumed difficulty of gaining the Native confidence for the issue of the bank would not, we think, be experienced, so long as its paper was freely received at the Government treasuries. At the present time, we believe the notes of the Bank of Bengal are in free circulation in all the districts below Benares.

We cannot but think it unfortunate that a gold currency was not long ago established, as the supply required for

India would have gone far towards preventing the relative depreciation of gold with respect to silver, which is alleged as the chief obstacle to its introduction as a standard. This depreciation has largely depended upon the drain of silver for Indian requirements. The introduction of gold as a currency would do away with the necessity of issuing notes for small amounts, leaving out of sight all other advantages it would confer.

(Signed) HASTINGS HICKS, SIM, & Co.

Minute by Messrs. W. F. Stearns & Co.

A PAPER CURRENCY in the form proposed is so nearly allied to an issue of *Paper Money*, that we think Government might as well experiment with the latter at once, and force upon us its indefinite promises to pay, as to pretend to protect the new circulation in the manner indicated. We need not go behind this arrangement of Government to guard its issues, to become convinced of the utter absurdity of putting blind faith in its banking operations. Certainly the experience of the past does not warrant our assent to the new movement until we have carefully studied it in all its bearings.

We look upon the proposition for a reserve of one-third bullion and two-thirds Government securities, to say the least, as unworthy of the first political economist of our day. The same cause that would tend to create a "run," and depreciate the Government notes, would affect the securities. It is not the paper that is then wanted, but simply the *hard cash*.

We cannot see the right which a Government has to suspend specie payment, to meet the emergency of a "run." This perhaps is an anomaly, for Government cannot do wrong—particularly the Indian. True, it has been done; but that proves nothing. Who would be willing to accept a note, as a legitimate cancelling of an obligation, which read: "—— days after date, I promise to pay if it suits my convenience"! We may trust a man to a certain amount, and he, afterwards becoming involved, is obliged to suspend:

does any one pretend to say that we would have trusted him as readily could we have seen the result from the beginning, even though finally he pays in full? We look upon it as a most unsound admission, when the right is granted to Government to meet in this way its emergencies. Because a man has been *forced* into the commission of a wrong, does that make the wrong right?

We affirm Messrs. Wm. Nicol & Co.'s third proposition, and do not think that past experience warrants us, as we said before, in putting much faith in Government banking operations. Let the issue of paper be left to the banks, Government contenting itself with its supervision, and a moderate share of the profits.

(Signed) W. F. STEARNS & Co.

Minute by Messrs. Wm. Nicol & Co.

THE peculiar circumstances of India, so far from rendering inapplicable the arguments which have been employed against a State Paper Currency in England, appear to us to increase their force.

If there be any country in the world where a State paper currency would be safe or admissible, it is surely England. The people of England thoroughly understand and appreciate the nature and advantages of a paper currency; they have perfect confidence in the stability of their Government; its measures are openly discussed, and can be made law only with the concurrence of the representatives of the people themselves; the motives of Government are not liable to be misconceived; and if abuses do take place, strong public opinion is swift to denounce them, and through the press and parliament Government is promptly brought to account.

In India, every difference of circumstance only enhances the danger and inexpediency of a paper currency issued by the State.

Paper money is a novelty in the interior of India,—its advantages have yet to be learned by the people. The faith of the people is not great in the stability of a Government which, as regards the mass of them, is an alien Government;

and on this account, as well as from the traditional feeling of the people towards their rulers, is an object of distrust.

In India, there is an entire absence of that spirit of true citizenship which stimulates a people to aid Government in carrying out its measures; the motives of Government are never rightly appreciated, and often grievously misunderstood; and in the present case of a paper currency, there are very few Natives who will credit, that the principal object of Government in the matter is to benefit the country at large; and lastly, the checks to abuse of power by Government, which exist in England, are all wanting here: the Government is practically despotic; public opinion is weak; and there is no power interposed between the Government and the people, to bring, when needful, the former to account.

Mr. Wilson is sensible of the dangers of the power he proposes to place in the hands of Government, and has endeavoured to meet them, by establishing a separate department, controlled by Commissioners, bound by oath to observe the law.

We need scarcely say, that such expedients afford no effectual guarantee against abuse of power.

We might enlarge on the far greater security to the public against abuse of the power of issue, which would be afforded by a proprietary bank, whose issues were controlled by Government; but we conceive that the greatest dangers lurking in Mr. Wilson's scheme lie, not in the possible abuse, but in the legitimate exercise, of its provisions.

This has been very able shown in the pamphlets and minutes before us; and even those Members of the Chamber who approve of a *State paper currency*, expose the dangers which may be apprehended from carrying out Mr. Wilson's scheme in its integrity.

Even the strongest advocates of Mr. Wilson's scheme recognise the danger of investing any portion of the coin and bullion received in exchange for notes in Government securities, which, when most needed, would be found inconvertible.

Mr. Wilson has urged, that "the notes issued would not be an addition to, but a mere substitution of, the silver coins which they displaced." This would certainly be the

case so long as the Commissioners retained the silver coin and bullion, for which they had given notes in exchange, safely locked up in their treasuries.

But, in this case, what advantages would the country gain to compensate for the cost (which will doubtless be very great) of the currency department and its numerous agencies?

It is true, that the increased *velocity* to the circulation, which would result from the substitution of a light portable article, like paper, for bulky rupees, would be considerable; but would it be worth, to the country, the cost of the establishment which Mr. Wilson proposes? We question it much!

When, however, the Commissioners proceed, in exercise of the powers conferred upon them, to invest any portion of the coin received, in exchange for their notes, in Government securities, they depart from the principle enunciated by Mr. Wilson in the above quotation, and notes corresponding in value to the amount of Government securities purchased become an *addition to*, and not a *mere substitute of*, the coin employed in the purchase of these securities. The coin is returned to the general currency of the country before the notes which had been issued against it had been withdrawn.

If Mr. Wilson strictly adhered to the principle of making his "notes a mere substitution of the coins which they displaced," no "redemption of a portion of the public debt," which he contemplates with much satisfaction, could possibly take place.

But it is an essential part of the scheme, that the Commissioners should invest a portion of the coin they hold in Government securities.

We have no doubt that Mr. Wilson's theory is, that no resale of these securities will ever become necessary. But in this we believe him to be entirely mistaken.

Panics will frequently arise, and from very trifling causes; and they are likely to be much more violent and lasting than anything of a similar kind in England.

Messrs. Finlay, Scott, & Co. have mentioned, that in November 1848, a panic occurred in Bombay, in consequence of the detection of a few forgeries in the bazar, and in the course of a few days four-fifths of the whole circulation of the Bank of Bombay were presented for payment.

Panics such as this will be frequent with the Currency Commissioners, and we can conceive nothing more difficult, nothing more isolated, than their position in such circumstances. Every man's hand will be against them: those who have bullion will hoard it; holders of notes will force them in; powerful speculators will foment disquiet, with the object of embarrassing the Commissioners, and forcing them to realise the securities they hold, at a sacrifice. The efforts of the servants of Government to allay panic will be misinterpreted; no one else will have any interest in checking the general alarm. The sale of securities, if possible at all, will produce only notes, which will but little relieve the Commissioners of their embarrassments; and we conceive that a protracted run must inevitably lead to a suspension of cash payments.

The aid which the Government treasuries could afford to the Commissioners in such a crisis would be trifling.

It is part of Mr. Wilson's scheme, that in future all large payments by Government shall be in notes, and that the revenue shall be received in notes—consequently, the treasuries will contain little but notes; and though they might indirectly aid the Commissioners, by putting into circulation none of the notes they hold, they could give no direct assistance, by supplying bullion.

But if, during a panic, the various treasuries suspended payments, with the view of keeping notes out of circulation, it would add greatly to the general distrust of Government.

But even if a suspension of cash payments were happily averted, it could only be by sacrifices, which, in a single day, would sweep away the profits of many years.

We shall be told, no doubt, that we exaggerate the probable extent of a panic;—the country is vast; notes would be long of coming in; and before they could all do so, panic would be allayed.

We think not; the people are very sensitive in money matters; and, as we shall presently show, will have a constant latent distrust of the Government notes, which any trifling cause may rouse into activity. The notes will not be much distributed; they will be in few hands—those of large *shroffs and traders*; small men will not hoard their little treasures in paper. A very few days will suffice to bring in, for payment, the bulk of the notes in circulation,

excepting those in Government treasuries, should any doubt of their convertibility arise.

It may be useful to illustrate the much stronger position of an independent *bank of issue*, under similar circumstances.

The Commissioners commence business, as it has been said, with a *box-full of paper*,—worthless paper, we take leave to call it; the bank with a treasury full of hard cash, —the paid-up capital of its proprietors.

The bank's investments in securities against the notes it issued would be with its own capital, and not, as in the case of the Currency Commissioners, with the borrowed capital of the public.

The great bulk of the bank's issues would pass into circulation by means of loans, discounts, and other similar banking operations; and, in the event of panic, the mere effluxion of time would relieve it of its embarrassments. But further, unlike the Government Commissioners, the bank would have a host of supporters: every shareholder, every constituent, would be eager to allay groundless panic; the officers of Government might interfere, with good effect, and without risk of their motives being misconstrued; the Government treasuries (if they could help at all) would be as available in this as in the case of the Commissioners; and in the worst event, should Government find it necessary, in order to avert a catastrophe, and give the bank time to work itself free of its difficulties, to interfere and temporarily relax the law, it could do so with good grace, and without any loss of credit.

We can scarcely conceive anything more unwise on the part of Government than the introduction of a measure which will involve it in every monetary convulsion which takes place in the country; adding another grave difficulty to the many it has already to encounter.

Had Mr. Wilson's scheme been in force in 1857, a suspension of cash payments must have inevitably occurred, to the great embarrassment of Government.

Several Members of the Chamber of Commerce have stated their opinion, *that notes emanating from any but a Government source would fail to command the confidence of the Natives of this country.* We dissent entirely from this opinion, not only on *primâ facie* grounds already referred to in the course of this minute, but also from the result of very careful and extensive inquiry.

Every Native whom we have consulted has expressed dissatisfaction with the Government scheme.

Most have stated, that either they themselves believe, or they think others will believe, that the object of Government is to collect all the bullion in the country, and on the first disturbance, either from an internal or external enemy, to carry it off to England! And they say that the good faith which will be observed at first, in cashing notes, will be disregarded as soon as a sufficient circulation is attained to make the spoil worth seizing, or whenever a political difficulty arises.

Others have said, that as Government evidently will have money, by any means, better let it have the money in this way than by some other more objectionable mode. Besides, say they, this scheme, if carried out, will afford capitalists frequent opportunities of profiting by the mismanagement of the Government department.

Amongst probable causes of panic suggested, we may mention, on account of their very simplicity, destruction of notes by fire, by white-ants, or by being eaten by goats.

The general feeling of those we have conversed with is, that the issue of paper money is not properly the function of Government ; and as the bargain appears to be more in favour of the recipient of the coin, than of the notes, they do not believe the motives of the Government to be disinterested.

They would trust notes by an independent bank in preference to notes issued by Government, because, in the first place, the issue of notes comes naturally within the range of banking business; and secondly, they would have more tangible security in the capital of a bank than the mere promises of Government.

If the Bank misconducted its affairs, there would be a court of appeal; but if Government acted unfairly, to whom could they look for justice?

These are expressions of the real feelings of men of large experience, some of them well educated, in constant intercourse with Europeans, and well acquainted with the use of paper money; and if such be their feelings, what may we reasonable expect will be those of men in the mofussil?

Our minute has already attained far too great a length, yet

we cannot conclude without briefly touching on other two points.

A proper paper currency should have, as Mr. Wilson has said, a sound metallic basis; but it must, at the same time, necessarily be based on a system of credit. No man would receive paper in payment of a debt, if he doubted its convertibility into coin of the amount it represented.

But Mr. Wilson's scheme is based on a system of force: his notes are to be legal tender; Government is in future to pay all its large obligations in paper, whether its creditors like it or not. They may find out, after they have received their notes, their value, by sending them to be cashed to the centre of the currency circle. In places remote from these centres, this would be attended frequently with loss.

We would here record our strong conviction, that in introducing the use of paper money into India, whether through the instrumentality of a separate Government department, as Mr. Wilson proposes, or by means of an independent bank, as we advocate, it should not be made *legal tender*, excepting in payments of revenue to Government.

We would make notes *legal tender* to Government with the object of giving the people confidence in them.

The withdrawal of their rights of issue from the three Presidency banks will greatly curtail their means of affording facilities to the public, and we vainly seek in Mr. Wilson's scheme for any compensating advantages.

We advocate a bank or banks for India, on the model of the Bank of England. The issues, secured by the partially invested capital of the proprietors, for the most part would pass into circulation in the course of banking operations, such as loans for short periods, discounts, &c.

Such a system would win for itself a way, by the conveniences it afforded.

We trust the Chamber of Commerce will lose no further time in declaring its convictions on this subject, and we take the liberty of suggesting that a Special General Meeting of the Members be called, on an early day, to consider the matter, and to adopt a Memorial to Government against Mr. Wilson's scheme, to which, if need be, the minutes recorded by Members might be attached.

14*th July*, 1860. (Signed) Wm. Nicol & Co.

APPENDIX M.

SUPPLY OF VEHAR WATER TO THE SHIPPING.

No. 885 OF 1860.

To the SECRETARY to the CHAMBER OF COMMERCE.

SIR,—In forwarding the accompanying original papers, I have been directed to say that the Municipal Commissioners will be glad to receive any suggestions the Chamber of Commerce may have to offer respecting the mode in which water from the Bombay Water-works should be supplied to the shipping in this port, both for daily consumption and for a sea voyage.

2. I am at the same time to add, that the Commissioners' present intention is to have a reservoir close to the bunder for the day's supply, and to have a tank, similar to that used by the railway, for the quantity required to be consumed on the voyage.

3. I have to beg that the original papers may be returned with your letter communicating the Chamber's suggestions.—I have the honor to be, &c.,

(Signed) H. G. BRIGGS,
Clerk to the Municipal Commissioners.

Municipal Commissioners' Office, Bombay, 10th Feb. 1860.

No. 23 of 1860.

To H. G. Briggs, Esq.,
Clerk to the Municipal Commissioners, Bombay,

Sir,—I am directed by the Committee of the Chamber of Commerce to acknowledge receipt of your letter No. 885 of 1860, with its enclosures, relative to the supply of Vehar water to the shipping of Bombay.

The Committee have given the matter their careful consideration, and they are of opinion, that the granting of such a monopoly as that applied for by Mr. Byramjee Nusserwanjee, would be most unadvisable, in as far as it would perpetuate the evils of the system which is now so loudly complained of by Captains of ships, and exclude the mercantile marine from the benefits of the new water supply, except on the exorbitant terms they are now paying.

In order that the necessary arrangements should be made for supplying ships expeditiously with large quantities of pure water, a considerable staff of servants and overseers, as well as expensive plant in the way of tank boats, leather hose, &c. would be necessary; and as such a system does not come within the ordinary duties of the municipality, the Committee presume that the Commissioners would not be inclined to take on themselves the supplying of the shipping with Vehar water.

Under the circumstances, the best plan to be followed, they are of opinion, would be,—

1*st.*—That the Commissioners should at once bring the water to the Apollo, Carnac, and Mazagon bunders, and to the others as soon as pipes are available, and at their expense erect such outlets for the water as their engineer may consider best suited for the purpose of supplying it to ships' boats, tanks, &c.

2*nd.*—That on the completion of these arrangements, the Commissioners should sell by public auction the right of supplying the water from these outlets; the lessee to pay nothing for the water beyond the amount of premium bid at the sale, and to be limited to a certain maximum charge, at which he would be bound to supply it to all and sundry who may apply. The maximum rate to be fixed might be arranged by the Commissioners, but the Committee would suggest a moderate figure of say 8 annas per ton, which would be a

great boon to the shipping, compared with the present rates paid, and which would, at the same time, admit of a premium being paid for the privilege by the lessee, which would considerably augment the municipal revenue.

3rd.—That the privilege should be let for one year at a time, and that care should be taken that the whole of the bunders should not be absorbed by one contractor.

4th.—That the contractor should be bound under his contract to have the means of supplying water constantly available at each bunder, and should be obliged to supply water on demand at a rate not exceeding the maximum fixed.

The advantages of such a system would be, that cheaper and better water would be supplied more expeditiously to the shipping than is at present the case. The certainty of procuring the water at a fixed rate at the bunder will probably lead to sufficient competition in the way of carrying it to the ships to keep the price of putting water on board moderate, while there is the additional check, that Captains of vessels can at all times come with their own boats, and take water off at the regulation price. The competition between the lessees of the bunders will be likely to lead to the best and most convenient modes being devised by them of shipping the water, as also to their charging even cheaper than the maximum rate, in order to induce dubashes and shipmasters to patronise their pipe. The re-letting of the privilege from time to time will enable the Commissioners to realise the full benefit of the value of the right of supply in the way of increased sums paid by the lessees. And lastly, it will be for the interests of the Commissioners themselves to make the means of outlet at the bunders as convenient as possible for the purposes required, as they will be certain to reap the benefit of their outlay in the prices which will be offered at the sale.

The Committee request me further to urge on the Commissioners the importance of taking early steps in the matter, and making the Vehar water available for the ships in harbour without delay.

The papers referred to in the letter of the Commissioners are returned herewith.—I have the honor to be, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 5th March 1860.

No. 1491 OF 1860.

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce.

SIR,—I am instructed to convey to the Chamber the thanks of the Municipal Commissioners for the valuable suggestions contained in your letter of the 5th instant, No. 23, on the mode of supplying Vehar water to the shipping in Bombay harbour.—I have the honor to be, &c.,

(Signed) H. G. BRIGGS,
Clerk to the Municipal Commissioners.

Municipal Commissioners' Office, Bombay, 15th March 1860.

APPENDIX N.

STRIKE OF CARGO BOATMEN.

Notice.

THE attention of all owners and tindals of cargo-boats is called to the first part of Clause 4 of the Amended Port Rules, published by order of the Right Honorable the Governor in Council, and dated Bombay Castle, 29th August 1859, which state,—

"Cargo-boats, full or empty, shall not be allowed to swing astern of any vessel without permission."

Two boats abreast may be allowed to hang astern of each ship; the Nos. of all in excess of this number will be taken. The full penalty the law will allow will be enforced against the owners of the said boats, in accordance with Act XXII. of 1855, Sections XI. and XVI.

Section X. of the above Act runs as follows:—"The Conservator of any Port subject to this Act may, in respect of any Vessel within such Port, River, or Channel, give directions for carrying into effect any Port-Rule in force within such Port."

(Signed) W. C. BARKER, Captain I. N.,
Master Attendant, and Conservator of the Port.

Office of the Master Attendant and Conservator of the Port, Bombay, 7th December 1859.

To RICHARD SPOONER, Esq.,
Commissioner of Customs, and Supt. of the Port.

SIR,—As the representatives of the Chamber of Commerce and of the mercantile community, we feel it to be our duty to address you in regard to the present position of matters between the harbour authorities and the native owners of cargo-boats. All shipping business, both in exports and imports, is at a stand-still, and very great inconvenience and loss is the consequence to all concerned. Of this, no one can be better aware than yourself, and we would respectfully request your assistance in devising some plan whereby the present stoppage of trade may be put an end to.

We have taken great pains to ascertain the exact position of affairs, and are inclined to think, that while the conduct of the boatmen in obstructing the navigation of the port is indefensible; on the other hand, the rules promulgated by the Master Attendant are likely to impede business to some extent, and are more stringent that there appears to be any necessity for.

The Master Attendant orders that not more than one tier of boats is to hang on astern of each vessel, which he considers to be all that is required for giving despatch in loading and discharging, as boats would be also allowed to lie alongside the ship in any number; and such a course he considers necessary for the free navigation of the port. With respect to this arrangement, we find, from careful inquiry at shipmasters and others acquainted with the matter here, that, with one tier of boats astern, proper despatch could not be given to a ship in loading and discharging, while the plan of boats lying alongside, except in the very calmest weather, would be certain to lead to damage to the cargo in the lighters.

Under these circumstances, being anxious to promote any arrangement by which business might be resumed, and the complaint of the Master Attendant, of obstruction to the harbour navigation, at the same time obviated, we beg to submit, for your approval, the following propositions, which we have ascertained would be gladly acceded to by the boat owners, and which would, in our opinion, also meet the views of the harbour authorities.

1*st*.—Those in charge of cargo-boats to be confined to a

double tier of boats astern of each ship; that is to say, not more than two boats in a line to lie astern of any vessel; any number of boats that can be accommodated to lie abreast of each other without hindrance, as well as alongside the vessel, should such a course be necessary.

2nd.—A mutual arrangement to be come to, which might fix the space to be allowed between the rudder of the vessel and the outermost of the two boats hanging astern, which would include the room necessary for two boats to swing clear of each other without risk of collision or damage from lying too close. We have found, on inquiry, that fifty to sixty yards would be the space required; but these details would, we think, be best left to the Master Attendant. Any deviation from the rule laid down would of course subject the transgressor to the punishment provided for the offence, and such punishment might be laid upon the party whom the authorities might consider in the wrong; and we would suggest that the owners of the boats should be made liable in case of the fault of their servants, by being made to sign an obligation to that effect. Should the Master Attendant see fit, he might also secure compliance with the order, by intimating to Captains of vessels on their arrival, that he would look to them to see that the rule of the port was carried out.

In the event of such an arrangement as the above being carried into effect, it would be the duty of the pilots, in berthing ships, to anchor them in such a manner as to provide for a clear passage through any part of the harbour, reckoning on the space of fifty to sixty yards, or whatever space may be fixed on, being occupied by boats carrying on the business of each vessel; and although the doing so might entail the necessity of spreading the ships over a larger area than they at present occupy, we are of opinion that the inconvenience arising from this would be more than counterbalanced by the advantages of the plan; the great thing being to give the pilots some certain data to go on as to the space likely to be occupied by each vessel and her boats, so as to enable them, in berthing new comers, to arrange for the navigation of the harbour being kept free and unimpeded. Should the plan be carried into execution, with the full concurrence of the boat owners, which would be the case now, the harbour authorities would have a

powerful weapon in their hands for the enforcement of the regulation in future; and with this view, we strongly recommend its adoption.

In conclusion, we would take the liberty of urging on you the absolute necessity of something being done, and that immediately, towards putting an end to the present most disastrous state of matters. For several days past, the whole shipping business of the port has been at a stand-still, involving consequences, direct and indirect, of a most serious nature, for which those who have caused the obstruction must be held to be deeply responsible.—We have the honor to be, &c.,

(Signed) ANDREW GRANT, Deputy Chairman,
For the Committee of the Chamber of Commerce.

Chamber of Commerce, Bombay, 22nd February 1860.

To Captain W. F. MARRIOTT,
Acting Secretary to Government,
Military and Marine Department.

SIR,—We have the honor to enclose a petition, signed by a large number of the Natives entrusted with the management of cargo-boats at this port, which they have requested us to forward to you.

In the prayer of the petition we quite concur, and have pleasure in recommending the interests of the petitioners to the favourable consideration of the Government.

We may mention, that we have with a great deal of difficulty got the owners of boats to agree to resume their work this forenoon, and thus put an end to the very awkward state of matters which has existed for the last few days (during which the shipping business of the port has been entirely stopped), on the understanding that Government will take the petition into their consideration; and that, until their decision on the matter is given, the harbour authorities shall temporarily allow the plan they propose to be pursued by them without molestation. Mr. Spooner

has, with his usual consideration, assisted us in bringing about an arrangement, and issued orders to the above effect. —We have the honor to be, &c.,

(Signed) ANDREW GRANT, Deputy Chairman,
For the Committee of the Chamber of Commerce.

Chamber of Commerce, Bombay, 23rd February 1860.

No. 943 OF 1860.

REVENUE DEPARTMENT.

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce.

SIR,—I am directed to acknowledge the receipt of the letter from the Committee of the Chamber of Commerce, dated the 23rd ultimo, with its accompanying petition from certain Natives interested in the management of cargo-boats at this port, and to inform you, that the decision of Government thereon has this day been communicated to the Commissioner of Customs, Salt, and Opium, to whom you will have the goodness to apply.—I have the honor to be, &c.,

(Signed) B. H. ELLIS,
Acting Secretary to Government.

Bombay Castle, 8th March 1860.

No. 303 OF 1860.

From RICHARD SPOONER, Esq.,
Commissioner of Customs, Salt, and Opium,

To the COMMITTEE of the CHAMBER OF COMMERCE.

GENTLEMEN,—Your esteemed favour of this day's date has duly come to hand.

2. In reply, I beg to state that the necessary instructions

have been issued to the Master Attendant and Conservator of the Port.

3. The boat strike is now over, and business has been resumed.—I have the honor to be, &c.,

(Signed) RICHARD SPOONER,
Commissioner of Customs, Salt, and Opium.

Bombay, Office of Comr. of Customs, Salt, and Opium, 23rd February 1860.

APPENDIX O.

FIRES AT COLABA.

To the SECRETARY to the CHAMBER OF COMMERCE.

DEAR SIR,—I have the pleasure to send you a copy of a communication I have received from the Deputy Commissary of Ordnance at Sholapore, reporting the spontaneous ignition of a piece of oiled cotton cloth, whilst exposed to the open air and to the heat of the sun. It was well known in the Ordnance Department, that cotton cloth, moist with linseed oil, would spontaneously ignite if placed in a box or other confined place; but Lieutenant Chetham's report shows it to be liable to combustion even if exposed.

To the Chamber of Commerce, largely concerned as its members are in oils and cottons, I deem it my duty to communicate Lieutenant Chetham's report.—I am, &c.,

(Signed) J. M. GLASSE, Colonel,
Inspector General of Ordnance and Magazines.

Bombay, 16*th May* 1860.

No. 86.

From the DEPY. ASSIST. COMMISSARY OF ORDNANCE,
Sholapore,

To the INSPECTOR GENL. OF ORDNANCE & MAGAZINES,
Bombay.

SIR,—I have the honor to report, for your information, a circumstance that occurred in this arsenal yesterday. The ordnance carriages were being cleaned, and afterwards rubbed

over with oil and water. On the lascars retiring for half an hour at 12 o'clock, a piece of old dungaree, about a yard or two, which had been used in the oiling process, was left, bundled up, on one of the felloes of the wheel of a sling carriage, close to a spoke. About a quarter past 12 o'clock, a smell as of something burning struck me. As there was no forge at work, and no fire in use, I inquired from whence it proceeded, and went and looked about, when I discovered the piece of oiled cloth above alluded to, burnt to nearly tinder, and the felloe and spoke on which it had been placed slightly charred, and burning. There was no flame. This was evidently a case of spontaneous ignition of the oily cloth, by the great heat and hot wind now prevailing at Sholapore (thermometer 120° in the sun). I immediately delivered orders that no oily cloth whatever should on any account be again left on any part of an ordnance carriage or cart, and that any used during the day should be destroyed by burning. I am aware that the spontaneous ignition of oily cloth has often taken place, generally, however, I have understood, when in a confined place; but do not remember having heard of such having taken place in the open air, where the carriage was at the time; therefore I deemed it proper to report the subject, that it might be more generally known, and such an event guarded against; being quite convinced myself, that the ignition of the cloth was, as I have mentioned, spontaneous.—I have the honor to be, &c.,

(Signed) SAMUEL CHETHAM, Lieut.,
Deputy Assistant Commissary of Ordnance.

Sholapore Arsenal, 27th March 1860.

(True copy)

(Signed) J. M. GLASSE, Colonel,
Inspector General of Ordnance and Magazines.

No. 56 OF 1860.

To Colonel J. M. GLASSE,
Inspector General of Ordnance and Magazines, Bombay.

DEAR SIR,—I am directed by the Committee of the Chamber to acknowledge with many thanks your note of

16th instant, enclosing a report on a case of spontaneous combustion at Sholapore.

This subject is particularly interesting at the present time, from the fact of numerous fires having lately occurred at Colaba, from a possibly similar cause. As the subject has been much canvassed, the Committee propose, if you have no objection, to place your note, and the letter of Lieutenant Chetham, on the editors' table, for insertion in the newspapers.—I am, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 21st May 1860.

No. 3946.

From the INSPECTOR GENL. OF ORDNANCE & MAGAZINES,
To the SECRETARY to the CHAMBER OF COMMERCE,
Bombay.

SIR,—I have the honor to transmit, for your information, copy of a letter, No. 1396, dated 21st instant, relating to a case of spontaneous combustion that recently occurred at one of the outstation arsenals.

2. You are at liberty to make what use you may think proper of this communication.—I have the honor to be, &c.,

(Signed) J. M. GLASSE, Lieut. Col.,
Inspector General of Ordnance and Magazines.

Bombay, 30th June 1860.

No. 1396.

From the OFFICER IN CHARGE AHMEDNUGGUR ARSENAL,
To the INSPECTOR GENL. OF ORDNANCE & MAGAZINES,
Bombay.

SIR,—I have the honor to report, that on the 16th March last, a case of spontaneous ignition occurred here, under the following circumstances:—

The branches had been cleaned out at noon, and all rags and rubbish collected, as usual, for removal by the sweeper.

The rags of the armoury branch, with which *cocoanut oil* only had been used, were collected in a piece of gunny, and placed on a pile of pig lead at the foot of the steps. These rags, subjected to the double heat of the lead and the vertical rays of a March sun, were found smouldering soon afterwards, and would doubtless have burnt freely, had not the smoke and smell drawn attention to them, and caused them to be drenched with water, when portions were found to be charred.

The combustion must have been entirely spontaneous, as no fire is ever permitted near this part of the premises, in the vicinity of which are the painters' shed, the camp equipage store, and the ordnance branch.—I have the honor to be, &c.,

(Signed) JOHN POTTINGER, Lieut. Col.,
In Charge Arsenal.

Ahmednuggur Arsenal, 21*st June* 1860.

(True copy)

(Signed) J. M. GLASSE, Lieut. Col.,
Inspector General of Ordnance and Magazines.

APPENDIX P.

CLAIMS FOR PASSAGE-MONEY BY TRANSPORTS.

No. 1391 OF 1860.

MILITARY DEPARTMENT.

To the COMMANDER IN CHIEF OF THE INDIAN NAVY,
The SECRETARY to the CHAMBER OF COMMERCE,
The QUARTERMASTER GENERAL.

Letter from the QUARTERMASTER GENERAL, No. 2300, dated the 14th March 1860; and from the COMMANDER IN CHIEF of the INDIAN NAVY, No. 304, dated the 17th March 1860;—on the subject of laying down a definite Rule for regulating Claims of Transports for Passage-money on account of Troops.

Resolution of Government on the above.

THE Quartermaster General's letter No. 1880, of 28th February, the Government Resolution No. 1050, of 13th March, and Commodore Wellesley's and Major Wray's present reports, to be communicated to the Chamber of Commerce.

2. The proposal that a statement, to be prepared about one week before embarkation, should be the basis of calculations of freight, appears fair and reasonable; and if the Chamber of Commerce be of the same opinion, no further discussion is necessary.

3. His Lordship in Council therefore proposes to make the rule accordingly; but awaits such reply as the Chamber may be pleased to afford.

(Signed) W. F. MARRIOTT, Captain,
Acting Secretary to Government.

Bombay Castle, 16th April 1860.

No. 1880.

From the QUARTERMASTER GENERAL OF THE ARMY,
To the SECY. TO GOVERNMENT, MILITARY DEPT.

SIR,—Referring to Government resolution No. 788, 24th instant, I am desired to point out, that as soon as a ship is taken up, the agents apply for information as to the number of men they are to provide for, which we of course must give them. In the case of the *Monteagle*, they have charged Government for this number. But it frequently happens, that at the last moment men disappear, women refuse to embark, children die, and we cannot fill up their places.

The distribution return of the numbers to embark is not made out until the people are on board generally, or the day before. It is on this document the charge ought to be made; for it seems unreasonable that agents should be allowed to make their charges on returns made out a month before the departure of the ship.—I have the honor to be, &c.,

(Signed) R. PHAYRE, Lieutenant Colonel,
Quartermaster General.

Head Quarters, Bombay, 28th February 1860.

No. 1050.

Resolution of Government.

THERE have been several misunderstandings about claims, founded on differences between the numbers intended and actually embarked.

2. It is absolutely necessary that there should be one statement, which shall be binding; all other information of pro-

bable numbers to be regarded as given for convenience of the shipowners, but not to the prejudice of Government.

3. The Quartermaster General's distribution return has been hitherto regarded as the proper document; but if this be not made "until the people be on board generally," it is scarcely fair to the owners to recognise no other basis of claims for non-embarkation of the allotted number.

4. His Lordship in Council suggests that the Commander in Chief of the Indian Navy, the Quartermaster General, and a mercantile gentleman, to be named by the Chamber of Commerce, if that body should be willing to assist in the matter, should meet, and determine on an equitable arrangement.

5. Before the Chamber of Commerce be addressed, the observations of the Commander in Chief of the Indian Navy and Quartermaster General on the suggestion are awaited.

(Signed) W. F. MARRIOTT, Captain,
Acting Secretary to Government.

Bombay Castle, 13th March 1860.

No. 304 OF 1860.

To H. E. the Right Hon. JOHN, LORD ELPHINSTONE,
G.C.B. & G.C.H.,
Governor and President in Council.

MY LORD,—With reference to the Government resolution No. 1050, of the 13th instant, calling for my opinion on the subject of the agents for transport ships being permitted to charge either upon the distribution return or the number of individuals actually embarked, I have the honor to state, that I have no doubt that an arrangement might be come to which would work satisfactorily. I think it would be fair towards the owners, or agents, of ships which convey troops at so much per head, that reasonable notice should be given them, prior to the period fixed for sailing, of the actual numbers which are to embark, and that they should be entitled to the proportion of passage-money for any short of such number, and which do not embark. Without such information, it is impossible for the agents to know exactly

what quantity of provisions it is necessary to lay in, and of course all surplus beyond the proportion which is required by the articles of agreement is a loss to the ship.

2. Hitherto, also, there has been no channel of communication on this subject, except the articles of agreement, which are generally only signed at the last moment, and after the troops are on board; and in my opinion the Quartermaster General would be the best person to give information to the agents, and, if more convenient, he could send it through my office, or that of the Agent for Transports.—I have the honor to be, &c.,

(Signed) G. G. WELLESLEY,
Commander in Chief I. N.

Office of the Commander in Chief I. N., Bombay, 17th March 1860.

No. 2300.

From the QUARTERMASTER GENERAL OF THE ARMY,
To the SECY. TO GOVERNMENT, MILITARY DEPT.,
Bombay.

SIR,—I have the honor to forward a memorandum on the subject of Government resolution No. 1050, 13th instant, as called for.—I have the honor to be, &c.,

(Signed) J. WRAY, Major,
Officiating Quartermaster General.

Head Quarters, Bombay, 14th March 1860.

No. 2299.

IMMEDIATELY after a ship has been accepted by Government, the agents expect a notice as to the number of men for whom they are to lay in provisions for the voyage. This is generally twenty-five days before the date fixed for embarkation. During that time, changes do, and must take place, numbers generally decreasing. In some cases, it is

possible to fill up vacancies, in others not. If this number, therefore, is to be considered as the voucher for payment, Government will undoubtedly have in some cases to pay forfeit.

If the distribution returns which are sent to the Government solicitor to be attached to the charter party are closed before the men embark, instead of, as now, when they are actually on board, it will certainly involve the necessity of making supplemental returns on every occasion, which will be an inconvenient and clumsy arrangement.

I would submit, in the absence of my superior, that the notice given, as usual, on the first acceptance of the ship, should *not* be considered the voucher referred to in clause 25, paragraphs 10 and 11, of the charter party, but that, one week before the embarkation, the Quartermaster General's Department furnish to the agents an official memorandum of the numbers appointed to embark; and that this be considered the minimum number for which the ship is to be paid.

The final distribution return, drawn up after the troops are on board, will give the actual number embarked, so that if that exceeds the number shown in the official memorandum, the owners can recover payment for the excess on the production of the final document.

This will, I think, meet the difficulty; and while it saves Government from the consequence alluded to in paragraph 2, Government resolution, it will ensure shipowners payment for the original number, or give them opportunity of selling any surplus provisions they may have laid in.

(Signed) J. WRAY, Major,
Officiating Quartermaster General.

Quartermaster General's Office, Bombay, 14th March 1860.

No. 58 OF 1860.

To Captain W. F. MARRIOTT,
Secy. to Government, Marine Department, Bombay.

SIR,—By direction of the Committee of the Chamber of Commerce, I have the honor to acknowledge receipt of resolution of Government No. 1391 of 1860, dated 16th

April, on the subject of laying down a definite rule for regulating claims of transports for passage-money on account of troops.

The subject being of very general interest, has received the fullest consideration at the hands of the Chamber; but the Committee regret to have to record their opinion that the proposal embodied in paragraph 2 of the resolution of Government does not appear a desirable mode of settling the question.

Should this proposal be carried into effect, the master of an accepted ship might possibly be placed in the position of making arrangements for a full complement of 350 men, and, a week before the proposed date of embarkation, he might find the number reduced by twenty per cent., or say 70 men, which, at £20 per head, would entail a loss to the ship of £1,400. It is true that he might take this contingency into his calculation at the time of tendering, and, by raising his demand considerably above the market rate of freight, cover himself from the probability of any actual loss; but the Committee would submit that the Government must necessarily be the losers in the end by an arrangement whereby those tendering are obliged to protect themselves from *possible* loss by offering their ships as a rule at much higher rates than would otherwise be necessary.

In the opinion of the Chamber, Government would best consult the public interest, as well as that of the mercantile community, if these engagements were rendered as certain as possible at the time the tenders were invited; and, with the view of effecting this object, they would respectfully suggest that the margin of short shipment available to Government should be limited to five per cent. of the total number for which preparations were ordered to be made, half passage-money being paid for as many as may be short shipped within that margin, and full passage-money for those short shipped in excess of five per cent.

Were this arrangement adopted, it would be found that tenders for troops would be more nearly on a par with current freights than if the proposal embodied in the resolution of Government were acted on. Although Government might sometimes have to pay some small sum to a ship as compensation for short shipment, they would derive a much larger

advantage from the lower rates at which tenders would probably be made.

It would likewise be a convenience to ships tendering, if intimation were given in the advertisement of the length of time for which they would be held bound to their tender; so that, at the expiration of perhaps a week from the date of tendering, they might be at liberty to seek other employment.—I have the honor to be, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 12th June 1860.

No. 2265 OF 1860.

MILITARY DEPARTMENT.

To the COMMANDER IN CHIEF OF THE INDIAN NAVY (with copy of the letter from the Secretary to the Chamber of Commerce),

The SECRETARY to the CHAMBER of COMMERCE,

The QUARTERMASTER GENERAL (with copy of the letter from the Secretary to the Chamber of Commerce).

Letter from the Secretary to the Chamber of Commerce, No. 58, dated the 12th June 1860.

STATES that the Chamber does not consider the measure proposed by Government for regulating claims of transports to passage-money on account of troops to be desirable, or likely to work well for the interests of the Government, and submits the Chamber's suggestions.

Resolution of Government on the above.

1. The Chamber of Commerce does not seem to have apprehended all the practical difficulties.

To instance one: suppose Government has about 800 men to send to England, and that three ships should tender to take their full complements, which may be supposed to be 300 each. Two ships do not suffice, whilst the number of men does not suffice to give three their full complement.

2. The Governor in Council will not here discuss the various modes of providing for the foregoing case, and for

others, but reverts to the former proposal, that the matter should be decided by the Commander in Chief Indian Navy, the Quartermaster General (or his Deputy in his absence), and a mercantile gentleman, to be named by the Chamber of Commerce.

3. The reply of the Chamber to this proposal will be awaited.

(Signed) W. F. MARRIOTT, Captain,
Acting Secretary to Government.

Bombay Castle, 23rd June 1860.

No. 71 OF 1860.

To Captain W. F. MARRIOTT,
Acting Secretary to Government.

SIR,—I am directed by the Committee of the Chamber of Commerce, in reply to your memorandum No. 2265 of 1860, Military Department, dated 23rd June 1860, to state that they have appointed Mr. Andrew Grant, Deputy Chairman of the Chamber, to confer with the Commander in Chief of the Indian Navy, and the Quartermaster General, on the subject of the claims of transports to passage-money on account of troops.—I have the honor to be, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 4th July 1860.

No. 2795 OF 1860.

MILITARY DEPARTMENT.

To the COMMANDER IN CHIEF OF THE INDIAN NAVY,
The SECRETARY to the CHAMBER OF COMMERCE,
The GOVERNMENT SOLICITOR (with copy of Committee's letter),
The QUARTERMASTER GENERAL.

Letter from the Committee for the determination of certain Rules connected with Tenders for Transport of Troops, dated the 20th July 1860.

PROPOSING three rules for adoption.

Resolution of Government on the above.

The third rule being simply a limiting provision of the second rule, the intention would seem to be more clearly expressed by two rules, as follows:—

1*st.*—On the tender of a ship being accepted, intimation is to be given at the same time by the Naval Department to the agents of the ship of the number of men, women, and children who will probably be embarked.

2*nd.*—Not less than seven days before the date fixed for the departure of the ship, the Quartermaster General's Department will send a return to the agents of the exact numbers to be embarked, and passage-money will be paid according to the number in that return; provided always, that the passage-money claimable shall not be for less than 97 per cent. of the number named at the time of accepting the tender."

2. The Governor in Council doubts whether these rules will be found to operate equally to both parties in such cases of unforeseen fluctuations of numbers as have lately occurred; they appear to be very favourable to the shipowners.

3. As they have been deliberately recommended by both the Commander in Chief of the Indian Navy and the Deputy Quartermaster General, the Governor in Council adopts them. Should they prove inconvenient, they can be reconsidered hereafter.

(Signed) W. F. MARRIOTT, Captain,
Acting Secretary to Government.

Poona, 9th August 1860.

No. 96 OF 1860.

To Captain W. F. MARRIOTT,
Acting Secretary to Government, Bombay.

SIR,—By direction of the Committee of the Chamber of Commerce, I have the honor to acknowledge receipt of your letter No. 2795 of 1860, dated 9th ultimo, laying down rules for the payment of passage-money for troops conveyed in transports.

These rules are quite satisfactory to the Chamber, who take for granted, that in case of a greater number of men

being eventually shipped than that in the Quartermaster General's return, full passage-money will be paid by Government for such excess.—I have the honor to be, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 6th September 1860.

No. 3336 OF 1860.

MILITARY DEPARTMENT.

From Captain W. F. MARRIOTT,
Acting Secretary to Government,

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce.

SIR,—I have the honor to acknowledge the receipt of your letter No. 96, of 6th September, and to state that it was of course intended that full passage-money shall be paid for persons shipped in excess of the number specified in the Quartermaster General's return.—I have the honor to be, &c.,

(Signed) W. F. MARRIOTT, Captain,
Acting Secretary to Government.

Poona, 20th September 1860.

APPENDIX Q.

WEEKLY TRADE RETURNS.

No. 131 of 1859.

To Richard Spooner, Esq.,
Commissioner of Customs, Salt, and Opium, Bombay.

Sir,—By direction of the Committee of the Chamber of Commerce, I have the honor to draw your attention to the great delay that takes place in the making up of the weekly trade returns.

The chief value of these documents depends upon the despatch with which they are prepared and laid before the public; and I would venture to suggest, that by altering somewhat the existing arrangements, their delivery might be much accelerated.

At present there are two distinct forms of trade returns prepared in the Custom House; one under the auspices of the Chamber of Commerce, and which has a considerable circulation, and the other prepared by one of the Custom House officials, and of which the circulation is but moderate. Of this latter publication, the Government subscribe for twelve copies, at a monthly allowance of Rs. 96.

The existence of these two publications, competing with each other, necessarily engenders considerable opposition, and the Chamber is given to understand that in many cases the Government returns are purposely delayed in order that the semi-official print may be prepared and issued before that of the Chamber: the effect is, that the public service suffers in

proportion. Another alleged cause of the delay is the want of sufficient staff in the department to keep pace with the increased trade of the port.

Under these circumstances, the Chamber would propose that such alterations as may be deemed advisable should be made in the returns of the Chamber, and that the Government should then subscribe for twelve copies, as hitherto, paying the Chamber the Rs. 96; and in order to increase the staff available for the purpose of more rapid preparation, the Chamber would propose to disburse the Rs. 96 in the office of the department, in whichever mode may be deemed most conducive to the encouragement of activity, mutual co-operation, and despatch.

The Chamber entertains little doubt, that by the means proposed the desired end may be accomplished; but, if preferred by the Government, the arrangement might be understood as experimental for one year only.

I have the honor to enclose a copy of the trade returns in question, and am, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, 2nd December 1859.

To H. BROOKE, Esq.,
Secretary Chamber of Commerce.

SIR,—We beg to call the attention of the Chamber of Commerce to the very dilatory manner in which their trade returns are published.

The statements are usually at least a month in arrears, a delay which appears to us quite inexcusable, as we know that the information can be obtained from the Custom House up to date. We take the liberty of suggesting that the staff employed by the Chamber for the purpose of getting up these statements be put into a state of greater efficiency.

We may further add, that we are informed, that by subscribing to the returns published at the Custom House,

we should be furnished with any statement of imports we might request up to within a day or two of date.—We are, &c.,

(Signed) WM. NICOL & Co.

Bombay, 21st December 1859.

No. 2322 OF 1859.

From RICHARD SPOONER, Esq.,
Commissioner of Customs, Salt, and Opium,

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce.

SIR,—Your esteemed favour of the 2nd instant, No. 131, has been duly received.

Weekly Trade Returns.

2. The weekly return published by an Assistant Commissioner has been ordered to be suppressed from the 1st proximo, as suggested by you.

3. The establishment of the Reporter General's Department has been ordered to be increased, and I trust now to be able to have the totals of the "pick-out" added up *weekly* instead of *monthly*, as suggested by you.

4. In fact, I am desirous of having the materials, from which my Annual Report is framed, prepared day by day, and without any delay, so as to assist the Chamber of Commerce in preparing their weekly returns.

5. At the same time, I would add, that as the weekly returns are got up by the Chamber for the use of the public, and are not required by me in my capacity as Reporter General, it will rest with the Chamber to employ such a number of persons, and make such other arrangements, as they may deem proper, with the view of preparing their returns.

6. I mention this, because sometimes I am called upon by Government to frame long and tedious statistical returns on various matters (hitherto not required of me, and for the preparation of which consequently no separate establishment has been provided), and in order to enable me to perform this additional task, I am compelled to employ thereon a portion of the Reporter General's Establishment, and, in con-

sequence, their own immediate duties fall into arrears.—I have the honor to be, &c.,

(Signed) RICHARD SPOONER,
Commissioner of Customs, Salt, and Opium.

Bombay, Office of Commissioner of Customs, Salt, and Opium, 27th December 1859.

To Messrs. WM. NICOL & Co.,
Bombay.

GENTLEMEN,—I am directed by the Committee of the Chamber of Commerce to acknowledge receipt of your letter of 21st December, and to state in reply, that the subject you refer to has had the contant attention of the Committee, who some months since brought the subject before the Commissioner of Customs, with the view of expediting the returns.

I have now the pleasure to inform you, that extra clerks have been placed in the Reporter General's Department, and some alterations effected in the system from the 1st January, which it is hoped may lead to the required result.

Application has likewise been made (as suggested by your Mr. James Fleming) to the Chamber of Commerce at Calcutta for the forms in use in that presidency, and when they are received, the Committee hope to effect such improvements in the trade returns as shall render them of real service to the mercantile community.—I remain, &c.,

(Signed) H. BROOKE,
Secretary.

Chamber of Commerce, Bombay, February 1860.

APPENDIX S.

FAIRS.

MHYJEE FAIR.

No. 1784 of 1860.

JUDICIAL DEPARTMENT.

To the SECRETARY to the CHAMBER OF COMMERCE.

SIR,—I am directed by the Honorable the Governor in Council to transmit to you, for the information of the Chamber of Commerce, the accompanying copies of a letter No. 671, of the 13th April last, and of its enclosure from the Magistrate of Khandeish, together with my reply, relative to the last Annual Fair held at Mhyjee, in that province.—I have the honor to be, &c.,

(Signed) H. L. ANDERSON,
Acting Chief Secretary.

Bombay Castle, 21*st May* 1860.

No. 671 of 1860.

From A. D. ROBERTSON, Esq.,
Magistrate of Khandeish,

To the SECY. TO GOVERNMENT, JUDICIAL DEPT.,
Bombay.

SIR,—I have the honor to submit, for the information of the Right Honorable the Governor in Council, a report on the Mhyjee Fair of the present year, forwarded by Lieutenant Scott, who superintended the fair in consequence

of Lieutenant Atkins, the Kunhur Bheel Agent, being in charge of the office of the Superintendent of Police of this province.

2. It will be observed, that the fair commenced on the 5th January, and was nominally closed on the 5th ultimo. The last shop, however, was not off the ground till the 21st idem. Thus, the business transacted extended over a period of a little above two months and a half,—a period in excess of any previous year.

3. The undermentioned troops were employed for the protection of the fair, and were at their posts in due time, with the exception of the party of the Poona Irregular Horse, who had to be obtained by drawing upon the several outposts scattered throughout the Zillah:—

150 men of the 30th Regiment N. I., under Lieutenant Woodhouse.
150 men of the 1st and 2nd Khandeish Bheel Corps.
27 sabres of the Poona Irregular Horse.
10 sabres of the Mounted Police of Khandeish.
33 peons from the various Talookas.

4. Previous to the commencement of the fair, I brought to the notice of Lieutenant Atkins the desire expressed, in reply to last year's report, to reduce the Bheel chowkeedars, whom it has been customary to station on the lines of road leading to the fair. In consequence, however, of the threatening position of some of the Bheels of H. H. the Nizam's territory, and the Ahmednuggur Collectorate, on our frontier towards Challisgaum, it was deemed prudent not to deprive many of our Bheels of this means of employment. I therefore allowed the chowkeedars to be entertained as usual; but as some of them did not join until after the fair had commenced, their services were dispensed with by Lieutenant Scott.

The number actually employed is 140, or three less than in the year preceding.

5. Lieutenant Scott strongly recommends the employment of these chowkeedars in future years, and I think, until the approaches to the fair can be properly patrolled by mounted police, the chowkees should not be entirely dispensed with.

6. Lieutenant Scott deserves great credit for the almost entire absence of crime during the past fair, which is mainly

to be attributed to the energy and zeal displayed by him, and the excellent measures which he adopted for its prevention and detection. It will also be seen, from Lieutenant Scott's report, that no sickness prevailed among the people, and that the causes of the only two cases of death which occurred were such as might be expected anywhere; thus showing the advantage of the sanatory measures which were so stringently carried out.

7. It will be seen from Lieutenant Scott's 7th paragraph, that the traffic this year in piece goods, jewellery, gold, silver, copper and brass vessels, &c. exceeded that of 1859 by Rs. 8,71,800-4-0. This must be ascribed to the settled state of the country. From the above large increase in the trade, the number of stalls increased, as a matter of course, and the proceeds of the fees levied thereon amounted to Rs. 2,199-10-6, being Rs. 724-6-6 in excess of the receipts of the previous year on that account. Lieutenant Scott states, in the concluding part of his 8th paragraph, that applications for 108 more new stalls had been made to him, and I have no doubt that when the railway is opened, the business done at the fair will greatly increase.

8. The following table exhibits the receipts and disbursements on account of the Fair Fund :—

Years.	Receipts.			Disbursements.			Balance.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
A. D. 1860.....	3,394	4	1	1,790	13	0	1,603	7	1
A. D. 1859.....	2,126	4	10	1,717	15	6	408	5	4

9. Maps of the fair have not as yet been received from the Superintendent of the Revenue Survey. They are, however, under preparation; when ready, a copy will be transmitted to Government.

10. The temporary bridge thrown across the river answers its purpose admirably. It is decidedly a great convenience, and costs but little, the charges for erecting it and removing it annually being one of the charges on the fair fund.

11. Of the estimated amount of property brought to Mhyjee, viz.....Rs. 48,27,323 4 0
There remained unsold..... 57,555 0 0

Thereby showing that business was actually transacted to the amount of....Rs. 47,69,768 4 0

or Rupees 2,63,358-10-0 less than the previous year.

12. In last year's report, the anomalous system of adding the amount of hoondees which had changed hands to the general returns of the merchandise sold and bought, was pointed out.

These hoondee transactions, which amounted last year to the large sum of Rs. 22,69,188, swelled the sum total of the trade to Rs. 50,95,904; whereas the trade this year, with hoondee transactions amounting to only Rs. 15,05,710, was Rs. 47,69,768. Deducting the hoondee transactions from the grand total of both years respectively, we find that the transactions in respect to merchandise exceed those of the previous year by Rs. 4,37,342, as shown by the following table:—

Years.	Grand Total of Business done, including Transactions in Hoondees.	Amount of the Hoondee Transactions.	Balance, being Amount of Merchandise actually bought and sold.
	Rs.	Rs.	Rs.
A. D. 1859.....	50,95,904	22,69,188	28,26,716
A. D. 1860.....	47,69,768	15,05,710	32,64,058
		Excess in 1860..	4,37,342

13. In paragraph 6 of his report, Lieutenant Scott has submitted a comparative statement of the transactions in cotton and linseed for the years 1858, 1859, and 1860. The quantities of these articles which were sold this year have been very much less than last year. The trade in cotton was particularly affected by the receipt from Bombay of news of the great decline in prices in that article which had taken place, shortly after the fair opened. This, again, reacted on the

hoondee market. The great increase in the sales of piece goods, jewellery, gold, and silver, above adverted to, is to be accounted for partially by the circumstance that during the next year no Hindoo marriages can be performed; there have, consequently, been more marriages this year than usual, and, therefore, the greater demand for those articles which are required in their celebration.

14. With reference to the suggestion made in the concluding portion of Lieutenant Scott's 12th paragraph, I beg to state that I have instructed Mr. Mackenzie to use, for the foundations of the approaches to the bridge, brushwood, or any other material which may answer the purpose, and is at the same time not expensive. I have also desired him to take proper care in stowing the timber.

15. In his 13th paragraph, Lieutenant Scott has pointed out the progress which has been made in the planting of trees. I would suggest that the sum applied for, for extending the culture of neem and other trees, be authorised, from the fair fund.

16. The dhurumsala recommended by Lieutenant Scott would prove a great boon to the Government establishment, who are, during the fair, crowded into a very incommodious place, called the kutcherry, and which is not spacious enough for the purposes for which it is intended.—I have the honor to be, &c.,

(Signed) A. D. ROBERTSON,
Magistrate.

Khandeish Magistrate's Camp, Malligaum, 13th April 1860.

No. 13 OF 1860.

From Lieutenant STANLEY SCOTT,
Second in Command 2nd Bheel Corps,
Superintendent of the Mhyjee Fair,

To A. D. ROBERTSON, Esq.,
Magistrate of Khandeish.

SIR,—I have the honor to submit to you my report of the Mhyjee Fair of 1860. It commenced nominally on the 5th of January (but no business was transacted until the 9th), and terminated on the 5th March. The last shop,

however, was not off the ground until the 21st. With such an enormous concourse of people, it is impossible for all to obtain carriage for the removal of their goods, should they even be desirous to do so, on one named day. This year the Hooli, commencing on the 7th, caused numbers to stay and pass it at Mhyjee, rather than have to attend its ceremonies on the road, or at any chance village. Moreover, the hope of being able to sell at the last moment caused numbers to linger. The reasons I have urged account for the sixteen days from the termination to the actual disappearance of the last shop.

2. To maintain order, and for the protection of life and property in and about the fair, the following troops were placed at my disposal:—

150 men of H. M. 30th Bombay N. I., under Lieutenant Woodhouse.
150 men of the 1st & 2nd Khandeish Bheel Corps.
27 sabres of the Poona Horse.
10 sabres of the Khandeish Mounted Police.
33 peons from the different Talookas round about the Fair.
140 Bheel Chowkeedars.

The detachment of the 30th arrived at the fair on the 6th of January, and I was able to dispense with their services on the 4th of March, on which day they marched for Dhoolia.

The detachment of the Bheel Corps arrived on the 7th January. Having allowed that of the 30th to leave, I detained the Bheels until the 9th of March, their presence being required during the Hooli.

The party of Poona Horse did not arrive until the 6th of February, and I directed them to commence their march to Dhoolia on the 7th of March.

The party of Khandeish Mounted Police arrived on the 7th of January, but being urgently required in the Western Districts, I dispensed with them on the 28th of February.

The Peons and Puttawallas had all arrived by the 12th of January. They remained for the protection of property; and as the mass of people dwindled away, they were allowed to go also,—all had left by the 21st of March.

The usual number of chowkeedars is 150, but by the 12th of January, as only 140 had arrived, I considered I

might dispense with the services of the extra 10, and accordingly did so. All these Bheels were paid up and dismissed on the 10th March, their duties being ended.

3. The fair this year was well and very numerously attended. I will touch on the business transacted at a later period; and now give a description of the Police arrangements, and how they answered.

The guards and pickets in and about the fair were taken night and day by the regulars and the Bheel Corps. A peon was placed in each bazar, to attend to its cleanliness, and to observe what was going on. I had forty-four chowkees, placed at distances of two miles apart, for twelve miles round the fair. At each chowkee there were three Bheels stationed. I had these chowkees visited every third day by patrols of Poona Horse, or mounted police, and at intermediate times visited by their own Bheel Naiks. By these means, I was always kept informed whether the Bheels were absent from their chowkees, or on the alert. I would strongly recommend the practice of entertaining these Bheels for this duty during the two months that the fair lasts. If they are well looked after, and do their duty, it is nearly impossible for a thief to escape, as he has to run the gauntlet of several of these chowkees, should he wish to go a greater distance than twelve miles from the fair. Moreover, it keeps a large body of men employed at a season when they would otherwise have little to do. It causes the officer conducting the fair, who is almost invariably a police officer of the province, to become personally acquainted with the Bheel Naiks, and their affairs, which is most desirable. It also affords these Bheels an opportunity of repaying Government a portion of any sums which may have been advanced to them. The system of sending peons from each of the surrounding mahals and petas is an excellent one, as I proved this year. They were able, during the first few days of the fair, to give me information of the arrival of several suspicious characters, and I then took the precaution of sending men of the Bheel Corps in undress, to move among the crowd and observe what went on. I ordered all lights to be put out by nine o'clock every evening, and no one to be moving about the streets after 10 o'clock at night. I also caused it to be proclaimed, that should any filth, rubbish, &c. be found in the streets, the owners of the

shops in whose front the above named should be discovered, should be fined. This had the effect of making every shopkeeper careful of that portion of the road in his immediate front. By these means, and by having the streets swept morning and evening, the whole fair was kept free from dirt, and the people free of sickness.

Five cases of petty theft, and two of robbery by day, without force, occurred. The former were disposed of by the Police Amuldar, the latter by myself. The value of the property stolen amounted in all to Rs. 198-3-0, the whole of which was recovered immediately, and restored to the lawful owners. From the above, it will appear, that owing to the arrangements that were made, and the excellent service rendered by the military police, Bheels, and all hands, that from the commencement to the termination of the fair, not a robbery or theft occurred that the offender was not immediately seized, punished, and all the property restored; and, in fact, it became an impossibility to commit either robbery or theft without the certainty of immediate detection. On the 29th of January, all the known pickpockets, of whom there were many, left the fair, having given out that the benefit to be derived was unequal to the risk incurred. The fair, with the above exceptions, passed off free of crime, and without the loss of any property.

4. I am pleased to be able to state, that during the fair, no disease of any kind made its appearance. Two cases of death alone occurred, in both of which cases the individuals died on arrival, proving that they brought their complaints with them.

5. Of the estimated amount of property brought to Mhyjee fair, namely .....Rs. 48,27,323 4 0
There remained undisposed of..... 57,555 0 0

Thereby showing that business was actually transacted to the amount of....Rs. 47,69,768 4 0

6. Although the fair of this was in extent and value much larger than that of any previous year, still the small amount of business done in the cotton, linseed, and hoondee trades (the most important items on the Mhyjee returns), accounts for the amount realised being less than that of last year. The hoondee suffered from so little being done in the

cotton and linseed trades. With these exceptions, it will appear from the annexed Appendices A and B, that under every other head there was this year a marked improvement. I now show a contrasted statement of the cotton, linseed, and hoondee trades of the years 1858,1859, and 1860:—

Year.	Cotton.			Linseed.			Hoondee.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
1858....	1,89,528	0	0	2,05,623	0	0	17,41,003	0	0
1859....	4,04,136	2	0	64,760	0	0	22,69,188	8	0
1860....	2,25,432	0	0	12,271	0	0	15,05,710	0	0

Showing, in all, a deficiency in the present year, compared with that of 1858, Rs. 2,35,292, and with that of 1859, Rs. 9,94,627-10-0, to be accounted for in the following manner:—

In the *first* place. The supply of cotton during the year 1859 was even more plentiful than that of the preceding year. From the opening of the fair until the 28th of January cotton was selling at Rs. 30 a pulla. On the 28th, news from England arrived, to the effect that the supplies from America had been so bountiful, as almost entirely to throw the Indian cotton out of the market. The price per pulla fell to Rs. 23. Later advices caused a further fall to Rs. 20. Although there were plenty of would-be purchasers while the fair lasted, the holders of cotton awaited a better season, rather than experience a dead loss.

Again, owing to the present China war, a large number of vessels have been chartered for the conveyance of troops, stores, &c.; the charges on freight, consequently, have greatly increased.

Secondly.—The above cause affected the linseed market also. The present holders would not reduce their prices, but remained firm, hoping for a change in their favour. At the commencement of the fair, the price per pulla was Rs. 17. During the fair, it fell to Rs. 11; and at the present time it has fallen to Rs. 8. Indeed, the trade may be said for a season to be entirely stopped.

The business transacted in cotton and linseed influences the hoondee trade greatly. Both these trades were so poor in the present year, that there is a difference to the amount of Rs. 7,63,478-8-0 in the hoondee trade, under these two heads alone, in comparison with that of 1859.

7. The traffic this year* in piece goods, jewellery, gold, silver, copper and brass vessels, grain, groceries, cattle, and miscellaneous articles, exceeds that of 1859 by Rs. 8,71,800-4-0. The reason for the increase, I am given to understand from the merchants, is on account of the settled state of the country, and the great security felt for the protection of their property at the fair. Again, in the coming year, among Hindoos, marriages are forbidden by the Shastra, owing to its being the Shinwast (this occurs every twelve years). Consequently, clothes, jewels, gold, silver, and groceries, all being requisites at marriage ceremonies, have been this year freely purchased.

8. From the above large increase in trade, the number of stalls this year was greatly in excess of that of former years.

The amount realised in 1859 under this head was	Rs.	1,475	4 0
Ditto ditto 1860.....		2,199	10 6
Thereby showing an increase of	Rs.	724	6 6

I am also pleased to have it in my power to report that applications for 108 fresh pukka stalls have been received; and I can fairly state, that should Government continue the protection it now affords, this already renowned fair will increase beyond all calculation.

9. The following are the gross receipts and disbursements of the fair :—

1, Balance of last year.....				Rs. 408	5 4
2, Opium sold by Government.	Rs. 68	4	0		
3, Fines	26	4	0		
Carried over..	Rs. 94	8	0	408	5 4

* There appears to be an error in the amount of the excess of traffic in these articles stated here; it should have been Rs. 6,83,536.

	Brought over..Rs.	94	8	0	408	5	4
4,	Balance refunded from the sum advanced for erecting the tramway.....	0	15	3			
5,	Sale of stalls of absent owners	784	8	0			
6,	Stall tax at 3 annas per hand frontage 2,199		10	6			
7,	Duty paid by venders of poisonous substances	78	0	0			
8,	Ditto ditto ganjia..	20	0	0			
9,	Ditto ditto opium...	61	0	0			
10,	Postage receipts	204	14	0			
11,	Postage stamps	96	0	0			
12,	Liquor venders' licenses.....1,060		0	0			
13,	Sale of guard huts	0	13	0			
					4,600	4	9
	Total....Rs.				5,008	10	1
Deduct sums not credited to Mhyjee fair..					1,614	6	0
				Rs.	3,394	4	1

Deduct DISBURSEMENTS:—

1,	Pay of chowkeedars.....Rs.	1,215	1	6		
2,	Repairs of kutcherry	11	13	0		
3,	Making guard-houses	26	2	10		
4,	Removing bridge in 1859....	31	10	9		
5,	Ditto ditto 1860 ...	22	3	0		
6,	Putting up tramway in 1860	158	14	0		
7,	Pay of 5 karkoons, for keeping returns of the goods entering the fair	151	11	6		
8,	Stationery	23	8	0		
9,	Torchman	7	11	10		
10,	Potdar	9	8	8		
11,	Crier	1	0	0		
12,	Miscellaneous	14	0	0		
13,	Trees about the fair	117	7	11		
					1,790	13	0
	Balance in hand....Rs.				1,603	7	1

The following table represents the results as compared with 1859:—

Year.	Receipts.			Disbursements.			Balance.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
1859.....	2,126	4	10	4,717	15	6	408	5	4
1860.....	3,394	4	1	1,790	13	0	1,603	7	1

Showing an increase over 1859 of Rs. 1,195, to be placed to the credit of the funds of the Mhyjee fair.

10. From all quarters, the merchants have expressed their satisfaction with the result of the sale of their goods this year, with the expection of those from Nagpore and Nirmul, who, I believe, have derived little or no benefit in comparison with past years, owing to every article of their trade being dearer than usual to start with, and to the heavy expense of carriage. They found, when the articles came to be exposed for sale, the prices so exorbitant, that purchasers were comparatively few.

11. Mr. Davidson, the Superintendent of Survey in Khandeish, sent two karkoons in the year 1859 to make a ground-plan of the Mhyjee fair, Lieutenant Alexander Bell being at the time superintending officer. On assuming charge this year, I applied to the Superintendent of the Survey for the plan alluded to, and received from that officer one not quite completed. Having given the necessary instructions to the karkoon who brought it, a map of the entire fair is now finished, which I consider to be most creditable to the survey department, as well as valuable to any future superintending officer.

12. The bridge across the Girna was laid down this year by Mr. Mackenzie. Only one month's notice was received by him, and heavy rain fell before the bridge was completed; yet no harm happened to it. I therefore consider that great praise is due for the scientific manner in which he performed the duty allotted to him. I would, however, humbly suggest the discontinuance of the use of palm trees for the foundation approaches to the bridge, as there are but few trees of this kind in the neighbourhood, and their transit expenses are heavy. For the bridge itself, they are absolutely necessary, and, with due caution being observed when the logs are stacked, may be brought forward for several

years, without any material detriment to them. In their place, I would recommend any jungle bushes which may be obtainable close at hand, mixed with cerbi, cotton stalks, and earth, or anything of which a solid foundation can be formed. Mr. Mackenzie coincides with me in the above proposition. The bridge was unanimously well spoken of by the merchants this year, and is certainly a great boon to them, saving expense, time, and property.

13. The sum of Rs. 200 was granted by Government at the request of the Superintendent of the Mhyjee fair, last year, for the purpose of planting trees in, about, and on the sides of the different roads leading to the fair, so that the natives may, in years to come, find that shelter which at present is wanted. 420 trees of various descriptions were planted, of which, at the termination of the fair, 279 were in a healthy condition, and, with watering and care, bid fair to thrive. The trees this year had hardly a fair chance: they were unavoidably planted after instead of before the rains; thus, before they had taken root, they were scorched up and choked with dust. The neem, buckum, pimpul, and bokree trees, I would suggest being planted in abundance, as they, of all others, thrive the best. The mangoe I would not recommend, being of slow growth, and liable to be destroyed by white-ants: out of the Rs. 200 granted, Rs. 117 have been expended, leaving Rs. 83 in hand. A karkoon is paid out of this sum, to attend to the young trees, and to see that they are properly watered. I would recommend that a further sum of Rs. 100 be added to that now remaining, for the purpose of renewing the trees that have died, and greatly extending the plantations.

14. There remains a balance in favour of the Mhyjee fair this year of Rs. 1,603-7-1. Should it meet with your approval, I would propose it being expended in the following manner. Let a dhurumsala be built, to cost about Rs. 250, by the side of the present small kutcherry; so that there would be suitable accommodation for the Mahalkuree, Foujdar, and their establishments, during the time the fair lasts. I would also have a guard-room built in it, as there is no place at present for untried prisoners, save the verandah of the kutcherry. Rs. 150 should be kept to meet the expenses of erecting the bridge for the fair of 1861, and Rs. 30 for taking it up again. The unexpended sum of

Rs. 83 has also to be deducted, together with the additional Rs. 100 alluded to in paragraph 13. Rs. 200 should be kept in reserve to meet contingencies; and the remainder I would expend on the principal roads leading to the fair, viz. those from Errundole, Cassoda, and Borenar.

To proposed dhurumsala and guard-room.. Rs.	250	0	0
Erecting bridge for 1861	150	0	0
Taking it up again	30	0	0
Due to tree fund, and recommended addition.	183	0	0
Reserve sum to be kept in hand	200	0	0
To be expended on improving the roads	790	7	1
Total....Rs.	1,603	7	1

15. In conclusion, my best thanks are due to Lieutenants Woodhouse and Carpendale, the native officers and men of the detachment of the 30th N. I., to the Poona Horse, the Mounted Police, the detachment of the Khandeish Bheel Corps, and their native officers, to the Bheel Karkoons and Naiks, for the very cordial manner in which they at all times rendered me assistance. To their zealous endeavours I attribute in a great measure the satisfactory results arrived at.

I have great pleasure in bearing testimony to the valuable assistance on all occasions afforded me by Seetaram Wiswanath, the Mahalkuree of Borenar, who is a most able public servant, and well worthy of notice.—I have the honor to be, &c.,

(Signed) S. SCOTT, Lieutenant,
Second in Comd. 2nd Bheel Corps, Supt. Mhyjee Fair.

Dhurrungaum, 2nd April 1860.

(Signed) A. D. ROBERTSON,
Magistrate.

APPENDIX A.

List of Goods of all descriptions, with their Quantities and Values, as correctly as they could possibly be ascertained, at the Mhyjee Fair, between the 5th January and 5th March 1860.

Description of Goods.	Quantity.		Value.					
	Mds.	srs.	Rs.	a.	p.	Rs.	a.	p.
Drugs, Grocery, &c.								
1, Azmoda (Sison Amni)	28	20	168	0	0			
2, Amsool (Garcinia Gambogia)	295	20	1,350	0	0			
3, Akulkura (Anthemis Pyrethorum)	39	20	791	0	0			
4, Al (Morinda Cetrifolia)	623	20	7,682	0	0			
5, Awulkuttee (Dried Myrabolams)	10	0	12	0	0			
6, Amleehullud (Turmeric coloured Zedoary)..	31	0	126	0	0			
7, Amlearee (Hibiscus Cunnubinus)	91	30	297	8	0			
8, Anjeer (Figs)..	54	0	545	0	0			
9, Aheleo (Sativum)	24	20	184	0	0			
10, Aodh (Frankincense)..	67	0	2,112	0	0			
11, Askund (Medicinal Root)	65	20	341	0	0			
12, Akrode (Physalis Flexuosa)	3	0	24	0	0			
13, Abhruck (Talc)	14	0	266	0	0			
14, Amdurjuwa (Seed of Nercismee)	1	4	21	0	0			
15, Asubgole (Seed of the Flea-wort)	28	10	68	0	0			

Description of Goods (continued).	Quantity.		Value.					
	Mds.	srs.	Rs.	a.	p.	Rs.	a.	p.
16, Assaroon	0	10	20	0	0			
17, Beemphool (The Marking-nut, Semi) ..	377	20	473	8	0			
18, Balheerda (Chebulee Myrabolam)	43	10	104	0	0			
19, Bedana (Quince Seed)	0	20	28	0	0			
20, Beroja (A kind of Gum Resin)	6	0	32	0	0			
21, Boondh (Coffee)	33	0	616	0	0			
22, Bole (Gum Myrrh)	45	0	278	0	0			
23, Baplee (Gum Arabic)	99	0	99	0	0			
24, Badam (Almond)	785	10	8,325	0	0			
25, Bhooceemoong (Ground Nut)	237	0	1,463	0	0			
26, Beelawa (Marking-nut)	60	0	66	0	0			
27, Bhojputra (Bark of a Tree)	4	20	37	0	0			
28, Bureeshope (Anise Seed)	96	20	843	0	0			
29, Brumhee (A Medicinal Root)	1	20	18	0	0			
30, Chaha (Tea)	1	0	25	0	0			
31, Chokecheenee (A particular Medicinal Herb).	12	20	191	0	0			
32, Chundun (Sandalwood)	12	20	107	0	0			
33, Charolia (Seed of the Chironjee Sapida) ..	60	20	1,212	0	0			
34, Chundrus (Gum Amina)	2	20	310	0	0			
35, Chupra Lakh (Sealing Wax)	3	0	84	0	0			
36, Deeg (Gum)	411	0	2,184	0	0			
37, Deekemallee (A strong smelling Resin, the produce of Gardenia)	116	20	597	0	0			

38, Dugurphool (a Medicinal Exfoliation from Stones)	10 30	98	0 0
39, Dalcheenee (Cinnamon)	270 20	4,408	0 0
40, Darroohullud (a kind of Turmeric)	0 10	10	0 0
41, Dewdar (a species of Pine Wood)	1 20	30	0 0
42, Dowana (Leaf used for scenting Cloth)	2 0	6	0 0
43, Dhunai (Coriander Seed)	193 20	376	0 0
44, Futtackrai (Fire Crackers)	85 Boxes.	780	0 0
45, Futturphool (a Medicinal Exfoliation from Stones)	3 0	15	0 0
46, Gool (Molasses)	697 10	41,830	0 0
47, Golee (Indigo)	670 10	55,443	0 0
48, Googool (Bdellium)	4 0	20	0 0
50, Gorumbee (Kernel of the Belawa Nut)	16 0	152	0 0
51, Goolal (Red Powder)	556 0	6,959	0 0
52, Gairoo (Red Chalk or Ochre)	147 20	907	0 0
53, Gokhroo (Fruit of Tribulus Tanuginus)	1 20	16	0 0
54, Goolabkullee (Dried Roses)	12 10	136	0 0
55, Gundhuk (Sulphur)	0 10	10	0 0
56, Gooduntee (Root of a Jungle Tree)	15 10	80	0 0
57, Gopeechundun (a whitish Earth, found at Dwarka)	21 0	59	0 0
58, Gooleebeez (Seed of the Indigo)	2 20	66	0 0
50, Hing (Assafœtida)	144 30	3,347	0 0
60, Hurtol (a Yellow Orpiment)	16 30	569	0 0
61, Heerda (the Produce of a Jungle Tree, used in Colouring)	937 20	1,104	0 0

Description of Goods (continued).	Quantity.		Value.					
	Mds.	srs.	Rs.	a.	p.	Rs.	a.	p.
62, Hingool (Vermilion)	1,094	0	1,933	0	0			
63, Hurmojee (a sort of Red Ochre or Earth) ..	497	0	1,489	0	0			
64, Heerakussee (Green Vitriol)	7	30	68	0	0			
65, Hullud (Turmeric)	1,359	0	6,757	0	0			
66, Joyputhee (Nutmeg Shell)	11	30	974	0	0			
67, Jaypalgotee (Croton Tiglium)	2	30	55	0	0			
68, Jungal (Green Colour)	0	10	20	0	0			
69, Joyful (Nutmeg)	24	10	2,366	0	0			
70, Jowleehullud (a sort of Turmeric)	262	0	1,647	0	0			
71, Jewkhar (Medicinal Preparation)	2	10	65	0	0			
72, Jeerai (Cummin Seed)	1,156	0	13,761	0	0			
73, Jestmud (Liquorice)	8	20	86	0	0			
74, Kaisur (Saffron)	0	3½	185	0	0			
75, Kajoo (Cashew Nut)	95	0	919	0	0			
76, Kootkee (Hellibore)	11	30	181	0	0			
77, Kallee Jeerai (Purple Fleabane Seed) ..	2	20	5	0	0			
78, Kupeela (Styrasa Benzoin)	33	0	513	0	0			
79, Kustoree (Musk)	21 Tolas.		252	0	0			
80, Keermouiwava (a Seed of the Dill kind) ..	1	20	10	0	0			
81, Kowree (small Shells)	147	0	573	0	0			
82, Kapoor (Camphor)	27	10	3,048	0	0			
83, Koonkoo (a Red Powder)	318	0	3,814	0	0			
84, Koossoomb (Dried Flowers used as a Dye) ..	3,167	30	42,379	4	0			

85, Koyful (Kiliorum Bark)	18	20	193	0	0
86, Kuchla (Preserved Vegetables of some sort) .	10	20	97	0	0
87, Kath (Hellibore)	621	30	11,959	0	0
88, Kismis (Raisins)	54	20	680	0	0
89, Kostkoranjun (Costus Arabicus)	18	20	131	0	0
90, Kaveecheeraeet (Gentiana Cherayeta) ..	4	20	65	0	0
91, Kamulkakree (a sort of Dried Vegetable) ..	1	20	12	0	0
92, Kowuch (Bark of a Tree)	1	20	45	0	0
93, Karuk (Dried Dates)	3,138	10	20,824	0	0
94, Khuree Sakur (Sugarcandy)	320	10	6,330	0	0
95, Khoopkula (a Medicinal Seed)	1	20	15	0	0
96, Khopra (Cocoanut out of the Shell) ..	5,078	10	45,794	0	0
97, Khurree (White Earth for White-wash, &c.)	12	0	33	0	0
98, Khujjoor (Moist Dates)	1,558	20	5,648	0	0
99, Khorasnee (Medicinal Seed)	1	20	23	0	0
100, Lal Bole (Red Aloes)	37	10	444	0	0
101, Lodh (a Dye)	51	20	461	0	0
102, Lowunga (Cloves)	716	30	11,282	0	0
103, Lakh (Sealing Wax)	1,112	20	14,219	0	0
104, Moyful (a Gall from Persia)	43	20	293	0	0
105, Munseel (Red Sulphuret of Arsenic) ..	1	20	30	0	0
106, Morechoot (Blue Vitriol)	19	0	572	0	0
107, Mein (Wax)	10	20	375	0	0
108, Mekia (Dried Fruit of a Creeper plant) ..	2	10	43	0	0
109, Meerai (Black Pepper)	946	0	14,275	0	0
110, Moordarsing (the Pods of a Jungle Tree) ..	5	10	156	0	0
111, Malcamnee (a variety of Heart Pea) ..	2	20	5	0	0

Description of Goods (continued).	Quantity.		Value.					
	Mds.	srs.	Rs.	a.	p.	Rs.	a.	p.
112, Mahooful (Mowrah Blossom)	1,324	0	2,566	0	0			
113, Mooltanee Mattee (a kind of Earth).. ..	1	20	12	0	0			
114, Munooka (Dried Grapes)	251	0	1,764	0	0			
115, Mogulaee Bedana (Seed from which a Medicinal Preparation is made)	1	10	15	0	0			
116, Mehendee (Leaves of the Mendhee bush) ..	5	0	62	0	0			
117, Mydaluckree (a sort of Drug)	42	20	168	0	0			
118, Nowsagur (Sal Ammoniac)	116	20	392	0	0			
119, Nurcuchola (Bark used as Medicine) ..	2	20	28	0	0			
120, Nagkaisur (Cassia Buds)	69	0	773	0	0			
121, Nukhola (Seed of a Jungle Tree)	0	10	7	0	0			
122, Narrul (Cocoanut in Shell)	No. 1,321,725		66,478	0	0			
123, Pechuck (Gold and Silver Filings)	17	3	1,701	0	0			
124, Puttung (Sapan Wood)	264	20	1,132	0	0			
125, Peestai (the Pistachio Nut)	13	0	368	0	0			
126, Pewlee Mattee (Yellow Earth)	72	0	422	0	0			
127, Papurkhar	1,157	30	4,114	0	0			
128, Peepulpan (Brass in very thin Sheaths) ..	625	0	1,956	0	0			
129, Pashanbhade (Pistachio Nut)	78	0	247	0	0			
130, Pauree (an Odoriferous Leaf)	10	20	163	0	0			
131, Pimple (Long Pepper)	63	0	1,130	0	0			
132, Para (Quicksilver)	2	0	240	0	0			
133, Pimplamool (the Root of Pepper)	44	0	1,790	0	0			

134,	Pullus Papra	2	0	4	0	0
135,	Ruskapoor (Corrosive Sublimate)	1	20	240	0	0
136,	Ruktchundun (Red Sandal)	....		143	0	0
137,	Ravecheenee (Rhubarb)	5	10	54	0	0
138,	Ral (Resin)	206	20	1,471	0	0
139,	Seekakaee (the Pod of a Creeper plant) ..	10	20	67	0	0
140,	Shapa (Anise Seed)	22	0	24	0	0
141,	Saindoor (Red Lead)	288	0	3,896	0	0
142,	Seetulcheenee (Medicinal Preparation) ..	0	10	15	0	0
143,	Saindeeloon (Rock Salt)	111	0	571	0	0
144,	Sailuj (a Medicinal Substance)	87	20	259	0	0
145,	Shahajeera (a variety of Seed)	124	20	2,885	0	0
146,	Soont (Dry Ginger)	204	0	1,881	0	0
147,	Sooparee (Betelnut)	8,589	20	86,227	0	0
148,	Swaghee (Borax)	64	10	2,716	0	0
149,	Sunchul (a kind of Salt)	19	20	92	0	0
150,	Sora (Saltpetre)	168	20	1,739	0	0
151,	Sungjeera (a sort of Steatitis)	38	20	171	0	0
152,	Samursing (Deer Horn)	36	0	120	0	0
153,	Sakur (Sugar)	3,111	20	45,253	0	0
154,	Sonamukhee (Senna Leaves)	104	10	689	0	0
155,	Salummisree (Salep)	2	20	165	0	0
156,	Saboo (Soap)	6	10	38	0	0
157,	Suffada (White Lead)	8	30	142	0	0
158,	Singura (the Fruit of an Aquatic Plant) ..	261	0	1,707	0	0
159,	Sun (Hemp)	603	30	1,234	0	0
160,	Sujjeekhar (a kind of Salt)	802	20	2,426	0	0

Description of Goods (continued).	Quantity.		Value.					
	Mds.	srs.	Rs.	a.	p.	Rs.	a.	p.
161, Soorma (Antimony)	5	30	127	0	0			
162, Sookaila (Dried Plantain)	13	20	114	0	0			
163, Suffademooslee (Country Alkali)	0	30	4	0	0			
164, Sootlee (Twine)	86	20	901	0	0			
165, Singturas (a kind of Stone)	29	0	114	0	0			
166, Syndhwa (a kind of Salt)	6	0	24	0	0			
167, Toortee (Alum)	1,196	30	9,350	0	0			
168, Talumkhana (Seed of a particular kind of Tree)	6	0	40	0	0			
169, Toop (Ghee)	6,491	20	1,39,392	0	0			
170, Tumalputree (Medicinal Leaf)	94	0	396	0	0			
171, Tumbaccoo (Tobacco)	773	30	3,908	0	0			
172, Teefoolate	18	20	251	0	0			
173, Valechee (Cardamom Seeds)	67	10	2,733	0	0			
174, Vava (a seed of the Dill kind)	12	30	55	0	0			
175, Vavaphool (Medicine)	0	10	150	0	0			
176, Vaildora (Cardamons)	17	30	2,818	0	0			
177, Vavding (Seed of the Embe Liaribis) ..	65	10	148	0	0			
178, Vala (Cuscus)	24	0	178	0	0			
179, Voykoombha (a Medicinal Fruit)	15	0	21	0	0			
Total of Grocers' Druggists' &c. Goods ..	....					7,63,106	4	0

Grains, &c.				
1, Rice	....	5,397	0	0
2, Jowaree	....	1,015	12	0
3, Moong	....	27	0	0
4, Dall of Ooreed	....	41	0	0
5, Castor	....	4	0	0
6, Moormorai	....	415	0	0
7, Rajgheera	....	88	0	0
8, Mussoor	....	78	0	0
9, Linseed	....	12,271	0	0
10, Wheat	....	2,631	0	0
11, Bajree	....	192	4	0
12, Tooree	....	10	8	0
13, Dall made of Grain	....	68	0	0
14, Chowlee	....	5	0	0
15, Pohai	....	134	0	0
16, Parched Grain	....	626	0	0
17, Khuskhus	....	45	0	0
18, Salt	....	8,423	0	0
19, Grain	....	2,662	0	0
20, Ooreed	....	2,116	0	0
21, Dall of Tooreed	....	2,316	0	0
22, Teelee	....	542	0	0
23, Watana	....	162	0	0
24, Ambaree	....	111	8	0
25, Mohoria	....	37	0	0
26, Bhuggur	....	60	0	0
27, Rice with Shell	....	45	0	0
Total of Grains, &c...	....			39,523 0 0

Description of Goods (continued).	Quantity.	Value.					
Miscellaneous.	Mds. srs.	Rs.	a.	p.	Rs.	a.	p.
1, Flour, Wheat	....	3,438	0	0			
2, „ Jowaree	....	11	0	0			
3, Bohorie work	....	46,129	0	0			
4, Oil for smelling	....	551	0	0			
5, Ink	....	2	0	0			
6, Tin Work	....	90	0	0			
7, Tailors' Work	....	113	0	0			
8, Ironsmiths' Work	....	450	0	0			
9, Vegetables	....	1,259	4	0			
10, Boodhlas	....	123	0	0			
11, Bamboos	....	1,613	0	0			
12, Ooplia	....	49	12	0			
13, Gold Lace	....	1,442	0	0			
14, Tuttees	....	48	4	0			
15, Fish	....	240	0	0			
16, Oil	....	962	12	0			
17, Gangia	....	771	0	0			
18, Butchers' Trade	....	266	0	0			
19, Printed Books	....	4,000	0	0			
20, Papers	....	880	0	0			
21, Silkmen's Work	....	821	0	0			
22, Dyers' Work	....	851	0	0			

| | | |

Description of Goods (continued).	Quantity.	Value.					
	Mds. srs.	Rs.	a.	p.	Rs.	a.	p.
50, Muniar Work	....	12,783	0	0			
51, Sweetmeats	....	6,715	0	0			
52, Deefria	....	45	0	0			
Total Miscellaneous..	....				1,16,570	0	0
Cattle, &c.							
1, Bullocks	....	13,221	0	0			
2, Horses	....	1,187	0	0			
3, Cows	....	61	0	0			
4, Goats	....	564	0	0			
5, Buffaloes	....	317	0	0			
6, Male Buffaloes	....	28	0	0			
Total Cattle, &c...	....				15,378	0	0
Jewellery, &c.							
1, Coral Beads	....	3,350	0	0			
2, Pearls	....	37,850	0	0			
3, Gold	....	1,77,021	0	0			
4, Gold Ornaments.	....	2,778	0	0			
5, Silver	....	1,18,900	0	0			
6, Silver Ornaments	....	551	0	0			
7, Copper Coins	....	817	0	0			
Total of Jewellers' Bazar..	....				3,41,267	0	0

	Cloths, &c.					
1,	Cloths made in Khandeish, consisting of all Articles forming the apparel of male and female Natives	2,00,757	0	0		
2,	Cloths made at Yeola	1,62,852	0	0		
3,	Do. at Ahmednuggur	28,850	0	0		
4,	Do. at Sholapore	74,128	0	0		
5,	Do. at Nagpore	3,61,317	0	0		
6,	Do. at Poona	1,650	0	0		
7,	Do. at Boorhanpoor	62,098	0	0		
8,	Do. in Europe	5,79,727	0	0		
9,	Do. at Ahmednuggur	81,100	0	0		
10,	Cotton Thread	58,886	0	0		
	Total of Cloths of all kinds..				16,11,365	0 0
	Metals.					
1,	Brass Vessels	61,320	0	0		
2,	Bhuttoor, a kind of Brass	700	0	0		
3,	Iron	34,303	0	0		
4,	Iron Ore	75	0	0		
5,	Iron Nurwuree..	1,584	0	0		
6,	Copper Vessels..	48,493	0	0		
7,	Wotaree Work	508	0	0		
8,	Iron Ore Khairee	1,322	0	0		
9,	Tin	4,638	0	0		
10,	Kassa	6,354	0	0		

Description of Goods (continued).	Quantity.	Value.					
	Mds. srs.	Rs.	a.	p.	Rs.	a.	p.
11, Zinc	....	5,365	0	0			
12, Iron Dueepet	....	4,489	0	0			
13, Steel	....	2,070	0	0			
Total of Metal Bazar..	....				1,71,221	0	0
Cotton.							
1, Cotton, cleaned..	....	2,25,432	0	0			
2, Bardan, or Bags for holding Cotton	....	24,622	0	0			
Total of Raw Cotton..	....				2,50,054	0	0
Silk.							
1, Raw Silk	....	13,129	0	0			
Total of Raw Silk..	....				13,129	0	0
Banking.							
1, Banking Business	....	15,05,710	0	0			
Total of Banking or Hoondee Business..	....				15,05,710	0	0

Abstract of the Foregoing.

Groceries, Medicines, &c.	Rs.	7,63,106	4 0
Grains, &c.		39,523	0 0
Eatables, &c.		1,16,570	0 0
Miscellaneous Property		15,378	0 0
Jewellers' Bazar		3,41,267	0 0
Cloth Bazar		16,11,365	0 0
Metal Bazar		1,71,221	0 0
Cotton and Gunny Bags		2,50,054	0 0
Raw Silk		13,129	0 0
Hoondee Bazar		15,05,710	0 0
Grand Total . .	Rs.	48,57,323	4 0
Deduct amount of goods unsold, as per Appendix B		57,555	
Leaving Total of business done in the Fair . .	Rs.	47,69,768	4 0

(Signed) STANLEY SCOTT, Lieutenant,
Second in Command 2nd Khandeish Bheel Corps.

Dhurrungaum, 2nd April 1860.

APPENDIX B.

List of Goods remaining Unsold at the termination of the Fair of 1860.

Description.	Value. Rs. a. p.
Cotton Cloth of Khandeish	5,555 0 0
„ of Europe	2,100 0 0
„ of Evela	9,200 0 0
„ of Ahmedabad	4,450 0 0
„ of Sholapore	1,225 0 0
„ of Berar	5,650 0 0
„ of Boorhanpoor	26,700 0 0
„ of Ahmednuggur	800 0 0
Cotton Thread	1,225 0 0
Silk	250 0 0
Miscellaneous	400 0 0
Total....Rs.	57,555 0 0

(Signed) STANLEY SCOTT, Lieutenant,
Second in Command 2nd Khandeish Bheel Corps.

Dhurrungaum, 2nd April 1860.

(Signed) A. D. ROBERTSON,
Magistrate.

No. 1783 OF 1860.

JUDICIAL DEPARTMENT.

To the ACTING MAGISTRATE OF KHANDEISH.

SIR,—I am directed by the Honorable the Governor in Council to acknowledge the receipt of Mr. Robertson's letter No. 671, of the 13th April last, together with the report therewith forwarded from Lieutenant Scott, on the fair held at Mhyjee during the present year, and to transmit, for your information, copy of the Government resolution on the subject.

RESOLUTION.—The careful supervision exercised by Lieutenant Stanley Scott over the operations of the Mhyjee fair, as evinced by the almost total absence of crime and sickness, is very creditable to that officer.

2. The amount of business transacted at the fair is very satisfactory, especially when the great falling off in dealings for cotton and linseed is taken into consideration. That falling off has been adequately explained in paragraph 6 of Lieutenant Scott's report; and the Honorable the Governor in Council is glad to observe, that notwithstanding this discouraging circumstance, the real business of the fair exceeded that of the preceding year by Rs. 4,37,342, as pointed out in the 12th paragraph of the Magistrate's letter.

3. The Honorable the Governor in Council fully approves and sanctions the expenditure of the balance of the fair fund as proposed by Lieutenant Scott.

4. With respect to the number of Bheels employed as chowkeedars, the Honorable the Governor in Council is of opinion that a reduction should gradually be effected. The object of employment in the first instance was to afford them the means of subsistence, but this object can now be otherwise secured, as the demand for labour in Khandeish must be considerable.

5. A copy of Lieutenant Scott's report should be for-

warded to the Chamber of Commerce.—I have the honor to be, &c.,

(Signed) H. L. ANDERSON,
Acting Chief Secretary.

Bombay Castle, 21st May 1860.

(True copy)

(Signed) H. L. ANDERSON,
Acting Chief Secretary.

SAMLAJEE FAIR.

No. 409 OF 1860.

POLITICAL DEPARTMENT.

From H. L. ANDERSON, Esq.,
Secretary to Government, Bombay.

To the SECRETARY to the CHAMBER OF COMMERCE,
Bombay.

SIR,—I am directed by the Right Honorable the Governor in Council to forward to you, for the information of the Chamber of Commerce, copy of a letter, and of its enclosure, from the Acting Assistant Political Agent in Charge Mahee Kanta, dated the 10th instant, No. 37, relative to the fair which took place at Samlajee, in the month of November last.—I have the honor to be, &c.,

(Signed) H. L. ANDERSON,
Secretary to Government.

Bombay Castle, 27th January 1860.

No. 37 of 1860.—Cons. No. 7.

Political Department.

From Captain S. C. Law,
Actg. Assist. Pol. Agent, in charge Mahee Kanta,
To H. L. Anderson, Esq.,
Secretary to Government, Bombay.

Sir,—I have the honor to report, that the usual fair took place at Samlajee in the month of November last, and continued for twelve days, having commenced on the 6th and ended on the 18th of the month.

2. The nature and value of the goods exhibited for sale, the variety, and amounts sold and unsold, are shown in the accompanying statement (Appendix A).

3. To facilitate a comparison of the results of this with those of the four preceding fairs, the following tables are given:—

Years.	Value of Goods brought for sale.	Goods sold.	Goods unsold.
	Rs.	Rs.	Rs.
1853.....	8,48,100	6,90,125	1,57,975
1854.....	9,11,025	7,63,175	1,47,850
1855.....	10,26,855	8,07,755	2,19,100
1856.....	9,93,151	9,08,641	84,510
1859.....	7,95,700	7,02,700	93,000

4. It will be noticed, from the above tables, that the amount of goods brought to this last fair is somewhat less in value than that of any fair since 1853. This may be attributed to the fair having ceased for two consecutive years, and to the late disturbances, and consequent excitement and distrust. The goods sold, however, bear a very favourable proportion to those carried back, and the sales were effected amongst a comparatively small attendance, about 35,000 persons having frequented this fair, against 100,000 in 1856, the year of the last gathering.

5. Of British manufactures brought for sale, and remaining unsold at the conclusion of the fair, the following tables

show the amount in value, and give comparison with the preceding four fairs:—

Years.	British Cloths brought for sale.	Sold.	Unsold.
1853	60,000	40,000	20,000
1854	20,000	18,000	2,000
1855	15,000	12,000	3,000
1856	35,500	35,000	500
1859	40,000	36,000	4,000

The goods taken back consisted chiefly of damaged or very inferior stuffs. There was a run demand for English piece cloths, and the prices realised on them were very fair. Had merchants but attended earlier, instead of at the end of the fair, as they unfortunately did, a still better business would have been done.

6. The unusually large amount of opium sold amongst comparatively few buyers is to be attributed to its increased price of late years, and the few facilities there have been for purchase in any quantity since the Samlajee fair ceased.

The best opium here sold as high as Rs. 425 per maund of 44 seers, and the inferior sorts at from Rs. 40 to Rs. 80 per maund.

7. The unusually high prices of all articles, however dissimilar, which appear to obtain throughout the country, prevailed also at Samlajee, and merchants left the fair well satisfied with the business done. Above all, bullocks show the largest increase in price, viz. from Rs. 25 to Rs. 60 per pair of small animals from Mewar, the demand being chiefly among the Bunjarees, or travelling dealers in grain, &c.

8. The growing prosperity of the fair may be said to be undoubted, in spite of the recent disturbances which have affected it; and now that general confidence has returned, every year will assuredly show a larger influx of visitors, and an increasing trade. In the Mahee Kanta, and the adjacent states of Mewar, Waghur, Malwa, and Marwar, where shops are few, and goods hardly obtainable, the Chiefs with their households, men of consequence, and inhabitants

generally, defer their purchases of clothes, copper utensils, tobacco, opium, sugar, spices, &c. till the fair time, and look forward to it with no little anxiety, and require but to be assured of protection, to attend in numbers from long distances.

9. In consequence of a report of cholera having made its appearance amongst the frequenters of the fair at Veerpoor, which happened this year to be held simultaneously with that of Samlajee, it became necessary to adopt precautions, in order to prevent merchants and others suddenly dispersed from Veerpoor bringing their unsold goods to Samlajee. Their appearance, if causing no real danger of cholera, would have inspired alarm to such a degree that the total and premature dispersal of the meeting would have resulted. I therefore made arrangements to exclude all those who had attended the Veerpoor fair. Providentially, this disease, though prevalent in many parts of the Mahee Kanta, did not make its appearance at Samlajee, where, in the dense crowd, its ravages would probably have been fearful.

10. The Edur State being no longer under the management of the Political Agent, the conduct of the fair, and general arrangements for the preservation of peace and security of property, were left to be made by the Rajah of Edur, assisted by a detachment of the Guzerat Provincial Battalion, under a subaltern officer, and a strong body of H. H. the Gaekwar's Contingent Horse. The Rajah himself was to have attended; and when at Sadra, in the latter end of October, received from Captain Raikes the most earnest advice to spare no pains in preserving order, and affording protection to foreign merchants frequenting the place, as this, the first fair left to his sole conduct, would be looked upon as a criterion for the future. A violent attack of fever prevented his personal attendance, but I am happy to say that the fair passed off in perfect peace and quietness. Some few robberies were, indeed, attempted on the highways leading to the assembly, but they were promptly checked by the horse patrols, and the perpetrators arrested, or the property recovered without delay.

11. The usual guard of regular native infantry and Guzerat Horse was applied for, but owing to the Okamundul disturbances, the General Officer at Ahmedabad was unable to furnish it. Much praise is due to the Gaekwar

Contingent Horse for the good spirit they evinced whilst detached to Samlajee. On this occasion, they entirely laid aside their habits of indiscipline, and mounted guard or patrolled with the regularity of disciplined troops. The consequence was a general feeling of security, which will tend materially to induce a good attendance in future.

12. It would be wanting in justice to close this report without a testimony to the zeal and efficiency of Dufturdar Heeralall Balkristna, who was deputed to attend the fair on the part of the Agency. To his exertions, continued through a violent attack of fever, is to be attributed in a great measure the good attendance of merchants, and also the harmony that existed throughout the meeting. In reporting on the fair held in 1858, Major Whitelock brought to notice Mr. Heeralall's "able conduct and judgment," and I have ventured to add my testimony in justice to a meritorious and able Government servant.—I have honor to be, &c.,

(Signed) S. C. LAW, Captain,
Acting Assist. Pol. Agent, in charge Mahee Kanta.

Mahee Kanta Agency Office, Sadra, 10*th January* 1860.

APPENDIX A.

Articles sold and unsold in the Samlajee Fair of 1859.

Number.	NATURE OF GOODS.	Total Maunds of Goods.	Value of Goods.	Goods sold.		Goods carried back.	
				Maunds.	Amount.	Maunds.	Amount.
	From Guzerat.		Rs. a. p.	Mds. srs.	Rs. a. p.	Mds. srs.	Rs. a. p.
1	Sugar	100	900 0 0	100 0	900 0 0	....	....
2	Sugarcandy	50	600 0 0	50 0	600 0 0	....	....
3	Chinlyes, &c., and English Piece Goods	....	60,000 0 0	....	56,000 0 0	....	4,000 0 0
4	Tobacco	1,143	4,000 0 0	1,143 0	4,000 0 0	....	....
5	Copper and Brass Vessels	80	3,000 0 0	80 0	3,000 0 0	....	....
6	Articles of various sorts	....	400 0 0	....	400 0 0	....	....
7	Gum Arabic, &c.	50	700 0 0	50 0	700 0 0	....	....
8	Paper	....	1,100 0 0	....	1,100 0 0	....	....
9	Silk, various sorts	....	500 0 0	....	500 0 0	....	....
10	Ironmongery	500	2,000 0 0	500 0	2,000 0 0	....	....
11	Flour, Rice, Dall, &c.	1,125	15,000 0 0	1,125 0	15,000 0 0	....	....
		3,048	88,200 0 0	3,048 0	84,200 0 0	....	4,000 0 0
	From Meywar.						
1	Opium	2,312½	5,65,000 0 0	2,029 6¾	4,87,000 0 0	283¼ 3¼	68,000 0 0
2	Cloth	....	55,000 0 0	....	45,000 0 0	....	10,000 0 0
3	Cummin Seed, Turmeric, &c.	....	5,000 0 0	....	5,000 0 0	....	....
4	Bullocks	....	60,000 0 0	....	55,000 0 0	....	5,000 0 0
		2,312½	6,75,000 0 0	2,029 6¾	5,92,000 0 0	283¼ 3¼	83,000 0 0
	From Malwa.						
1	Cloth, Buranpoory	....	7,000 0 0	....	6,000 0 0	....	1,000 0 0
3	Copper and Brass Vessels	27	1,000 0 0	27 0	1,000 0 0	....	....
4	Articles of various sorts	....	4,000 0 0	....	4,000 0 0	....	....
4	Opium	83¼	20,000 0 0	62¼ 6¾	15,000 0 0	20¾ 3¼	5,000 0 0
5	Gum Arabic, Turmeric, &c.	100	500 0 0	100 0	500 0 0	....	....
		210¼	32,500 0 0	189¼ 6¾	26,500 0 0	20¾ 3¼	6,000 0 0
		5,570¾	7,95,700 0 0	5,266¼ 3¼	7,02,700 0 0	304 6¼	93,000 0 0

(Signed) S. C. LAW, Captain,
Actg. Assist. Pol. Agent, in charge Mahee Kanta.

Mahee Kanta Agency Office, Sadra, 10*th January* 1860.

(True copies) (Signed) H. L. ANDERSON,
Secretary to Government.

APPENDIX T.

ADDRESS TO LORD ELPHINSTONE.

To the Right Hon. JOHN, LORD ELPHINSTONE,
G.C.B., G.C.H.

MY LORD,—On the retirement of your lordship from the high and responsible position which you have so ably filled for upwards of six years, the members of the Bombay Chamber of Commerce have deputed me to wait upon your lordship, in order to express the sentiments which animate them on the occasion.

It is not the object of the present address to refer to the successful manner in which your lordship dealt with the energencies of the eventful year 1857, nor to advert to the ability with which you have administered the Government of this Presidency; but to place on record the lively appreciation by this Chamber of the liberal and enlightened policy displayed by your lordship in questions relating to mercantile interests.

The Chamber gratefully acknowledges the uniform courtesy which has characterised your lordship's communications with it, the consideration which has led you in so many nstances to invite its opinion, the weight which you have attached to its views, whether in favour of, or, as in some cases, in opposition to existing or proposed enactments, and the readiness evinced by your lordship's government to give effect to its suggestions in matters of commercial importance; and although no longer immediately connected with this Presidency, the Chamber feels confident that your lordship will continue to take the same warm interest, as heretofore, in advancing its prosperity.

On the part of the Members of the Chamber, it only remains for me to assure your lordship, that you carry with you from Bombay their best wishes for your speedy restoration to health, and that every happiness and prosperity may attend your lordship's future career.—I have the honor to remain, &c.,

(Signed) HENRY SCOTT,
Chairman.

Chamber of Commerce, Bombay, 9th May 1860.

REPLY.

To H. SCOTT, Esq.,
Chairman Chamber of Commerce.

IT affords me the most sincere gratification to receive this address, and to learn from it, how liberally my humble endeavours to promote the mercantile interests of this Presidency have been appreciated by the Chamber of Commerce.

It has been my good fortune to witness the extraordinary increase in the trade of this port, which has taken place within the last six years.

From Mr. Spooner's official returns, I find that the tonnage of vessels, arriving at this port, has increased since 1854 from 404,000 tons to 705,000 in the last year,—while in one of the intervening years, 1857, chiefly owing to the number of troops sent out from England, it actually reached 802,000 tons.

The customs, which five years ago produced only thirty lakhs per annum, last year amounted to sixty-one lakhs, of which only a very inconsiderable portion was due to the enhanced duties on imports.

This rapid expansion of commercial enterprise is, I am happy to think, not owing to wild speculations, or to any other temporary and fortuitous causes. It is chiefly owing, I believe, to the steadily increasing demand for European manufactures in this country, and to the growth of a corresponding demand for our exports in Europe. If, by God's mercy, no interruption of the peace of Europe should take place, there is every reason to hope that this increase will be progressive.

The extension of railways, and the gradual improvement of our internal communications, sadly retarded as it has been by the restrictions upon expenditure necessitated by the mutinies, must have an important influence on the development of our trade.

The Chamber of Commerce only does me justice in believing that I shall ever feel a warm interest in the prosperity of Bombay. I confidently hope that in the next few years the reports of the Commissioner of Customs will exhibit equally convincing, and, if possible, still more astonishing proofs of increasing prosperity than in the last five.

It only remains for me to request that you will convey to the Chamber my grateful thanks for their kind wishes towards me personally, as well as for the honor which they have done me in presenting me with this address.

(Signed) ELPHINSTONE.

9th May 1860.

APPENDIX U.

RAILWAY COMMUNICATION.

No. 3057 OF 1860.

To H. BROOKE, Esq.,
Secretary to the Chamber of Commerce.

SIR,—In compliance with the request contained in your letter of the 18th July last, No. 73, I am desired to forward, for the information of the Chamber of Commerce, the accompanying memorandum of the progress of the Great Indian Peninsula Railway during the year ending the 30th June last.—I have the honor to be, &c.,

(Signed) W. LANGDON,
Secretary.

Great Indian Peninsula Railway Company's Offices, Bombay 18th September 1860.

Memorandum of Progress of the Great Indian Peninsula, Railway during the Year 1859-60, *ending the 30th of June last, for the information of the Chamber of Commerce.*

THE following four sections of the railway were opened during the year :—

South-Eastern Extension.—Decksal to Barsee Road, 50½ miles, on the 24th October 1859.

Ditto.—Barsee Road to Mohol, 28¼ miles, on the 2nd of January 1860.

Ditto.—Mohol to Sholapore, 20½ miles, on the 6th of June 1860.

North-Eastern Extension.—Wassind to Shawpore, 3¾ miles, on the 2nd of February 1860.

The total length of new line was 103 miles, and the length available for public traffic at the close of the year was thus increased from 194¾ to 297¾ miles, of which 92¼ miles are upon the Konkun, and 205½ miles upon the Deccan.

The railway under construction was 611¼ miles long, comprising the following contracts :—

Contract No.	7,	Bhore Ghaut Inclines	13¼ miles.
Do.	9,	Decksal to Sholapore	99¼ „
Do.	10,	Wassind to Kussarah	25¾ „
Do.	11,	Thul Ghaut Incline	9½ „
Do.	12,	Egutpoora to Bhosawal ..	190½ „
Do.	13,	Bhosawal to Oomrawuttee	134¼ „
Do.	15,	Bhosawal to Hurdah	138¾ „

The line contracted for, and being staked out, was 325 miles long, consisting of,—

Contract No.	14,	Oomrawuttee to Nagpore.	129 miles.
Do.	16,	Hurdah to Sohagpoor....	80 „
Do.	17,	Sohagpore to Jubbulpore	116 „

The Sholapore and Madras Railway Junction, 123 miles long, will be begun as soon as possible next working season.

Two new branch lines have been laid out and surveyed; one of them strikes off from the North-Eastern Extension in the Nerbudda Valley, and ascends the Bhyroo Ghaut to Indore. This branch is 96 miles long. The other leaves the South-Eastern Extension near the foot of the Bhore Ghaut Incline, and runs on to the salt districts of Penn, and is 26 miles long. These lines have not yet been reported upon.

The principal feature in the constructive operations of the Railway Company was the extensive visitation of cholera along the greater portion of the line, and the exceptional and heavy list of casualties from death and sickness, comprising the eminent Consulting Engineer, Robert Stephenson, Esq., M.P., Lieutenant Colonel Crawford, Consulting Engineer to the Bombay Government, three Assistant Engineers, five principal Contractors, four Company's Inspectors, and eleven Contractors' Agents, all deceased ; and seven compelled by sickness to leave India.

Notwithstanding these untoward events, the great works of the Bhore and Thul Ghaut Inclines have made more rapid progress than in any previous year.

Upon the North-Eastern Extension, the line will probably be opened from Shawpore to Kussarah, at the foot of the Thul Ghaut Incline, and from Egutpoora at its summit to Nassick, before the close of the current year 1860, and onwards from Nassick to Chalisgaum or Nandgaon in Khandeish in the course of next spring.

Great difficulty has been found upon some parts of the line in obtaining an adequate supply of skilled labour.

Extensive additions were made by the Company to various stations, for the better accommodation of the traffic.

The various portions of the Company's Electric Telegraph have been completed in working order prior to the opening of the corresponding sections of the railway. The work consisted of the thorough completion of the lines already in use; of four additional stations along them; of 102 miles from Decksal to Sholapore, and from Wassind to Shawpore. Upon the North-Eastern Extension, beyond Shawpoor, the work is in a forward state; the stores are being distributed as far as Bhosawal, to which the telegraph will be completed next season.

ALLIANCE PRESS, Bombay: CHESSON & WOODHALL, Printers.

00133530

Digitized with financial assistance from
Government of Maharashtra
on 01 February, 2020